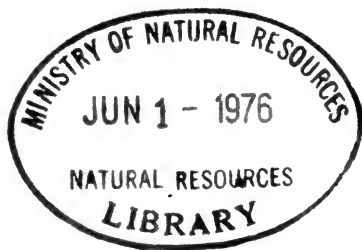


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Twenty-Ninth Annual Report

OF THE

*Game and Fisheries Department

1935-1936

WITH WHICH IS INCLUDED THE REPORT FOR THE
FIVE MONTHS' PERIOD ENDING MARCH 31st, 1935.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1937



ONTARIO

TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

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TO THE HONOURABLE HERBERT ALEXANDER BRUCE,
a Colonel in the Royal Army Medical Corps, F.R.C.S. (Eng.)
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Twenty-Ninth Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1936.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
Minister in Charge,
Department of Game and Fisheries

Toronto, 1937.

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TWENTY-NINTH ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

(With which is included the Report covering the
five months' period ended March 31st, 1935.)

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:—I have the honour to submit to you this, the Twenty-Ninth Annual Report of the Department of Game and Fisheries, outlining the various departmental activities for the year ended March 31st, 1936.

Comparative tables in this report will generally omit reference to those included in the previous report and which covered the transition five month period existing by reason of the change in the provincial fiscal year, which as noted above is included herein.

FINANCIAL

The subjoined table shows the total revenue of the Department during the year reported upon, and details the various sources of revenue with the amount derived therefrom in each instance.

REVENUE FOR THE FISCAL YEAR ENDING MARCH 31, 1936.

GAME—

Royalty	\$110,884.40	
Licenses—		
Trapping	\$28,315.15	
Non-resident Hunting	53,080.00	
Deer	56,544.05	
Moose	2,728.00	
Gun	69,635.93	
Dog	3,239.35	
Fur Dealers	27,186.00	
Fur Farmers	6,940.00	
Tanners	170.00	
Cold Storage	109.00	
Hotel & Restaurant	20.00	
	<hr/>	
	247,967.48	
		\$358,851.88

FISHERIES—

Royalty	\$ 7,600.50	
Licenses—		
Fishing	\$ 89,381.10	
Angling	200,641.65	
	<hr/>	
	290,022.75	
Sales—spawn taking	241.50	
	<hr/>	
		297,864.75

GENERAL—

Guides' Licenses	5,630.00	
Fines	9,018.40	
Sales—Confiscated articles etc.	7,162.45	
Rent	3,096.50	
Commission	1,952.40	
Miscellaneous	362.34	
	<hr/>	
		27,222.09

\$683,938.72

The total amount of this revenue exceeds by \$139,200.25 the amount collected during the period of the last fiscal year reported upon, i.e., ending October 31st, 1934, and represents an increase of more than twenty-five per cent. By far the greater proportion of this additional revenue resulted from the increased issue of non-resident licenses, an increase amounting to practically \$100,000.00,—more than \$72,000.00 from the sale of additional non-resident angling licenses, and more than \$27,000.00, from the sale of additional non-resident hunting licenses. Resident hunting licenses, which this year for the first time included licenses to use dogs to hunt deer, netted an additional \$22,500.00, while revenue from fines and sales of confiscated articles, resulting from the operations of the enforcement service, also increased by more than \$7,800.00.

The total expenditures of the Department for this financial year, including both ordinary and capital, amounted to \$451,041.91, and it will be noted that our operations showed a surplus of revenue over expenditures totalling \$232,896.81. Compared with the previous twelve-month period reported upon, expenditures show a decrease of somewhat in excess of \$105,000.00, and while the figures quoted are an evidence of the considerably improved financial position of the Department, such a desirable condition has been attained not through any curtailment of necessary services or interference with departmental activities, but rather because of close and careful scrutiny and the resulting elimination of any unnecessary items of expenditure.

STATISTICS

Various tables of statistics are included as appendices to this report. They contain in detail considerable information with reference to the output of the fish hatcheries and rearing stations maintained and operated by the Department under the Fish Culture Branch, as well as information as to the distribution of the product of these hatcheries and rearing stations and the waters re-stocked therewith. Tables are also provided giving information with reference to the commercial fisheries of the Province, while interspersed throughout the actual report are statistical facts which refer to other branches of departmental activity, assembled, compiled and included herein for information, and all of which may be considered to be of value and interest.

GAME

The following table gives details as to the numbers of the various hunting licenses, both resident and non-resident, issued during the year, as compared with similar information for the two preceding years, and which figures it will be observed indicate increases in practically all instances, and substantiate the comments made earlier in this report concerning the improvement in our revenue collections:—

	1933	1934	1935-36
Resident Moose	673	512	496
Resident Deer	12,756	12,890	14,779
Resident Camp (Deer)	165	175	258
Resident Farmers' (Deer)	5,113	4,902	5,221
Resident Gun	97,561	76,210	85,884
Non-resident small game	318	489	686
Non-resident deer		475	652
Non-resident "General"	634	457	680

We shall now endeavour to summarize conditions as they apply to our game life, animal and bird,—as compiled from reports submitted by the officers of the departmental field service stationed in various sections of the Province:—

DEER:—In the eastern portion of northern Ontario these animals are not too plentiful, and little, if any, improvement was in evidence. In the western portion of the northern division, including Rainy River and Kenora Districts and the westerly half of the District of Thunder Bay conditions are splendid and the animals quite numerous. So far as the easterly portion of Thunder Bay is concerned, while conditions are not as favorable as in the westerly portion, reports indicated that their numbers are increasing. In southern Ontario or south of the French and Mattawa Rivers and Lake Nipissing, they appear to be increasing in the counties in the western and eastern sections where the protection of an entire closed season has been effective in recent years, particularly in those areas in which favourable habitat is available. They do not exist in the most southerly counties of the central portion of southern Ontario, in which there has not been the same protection, and which areas are of course quite closely settled. In those sections of southern Ontario in which these animals are subject to the most intensive hunting during the open season, reports indicate that speaking generally, existing conditions are favourable and somewhat improved.

MOOSE:—Are found in fair numbers in various parts of the north and apparently increasing in the eastern portion, though in southern Ontario they are very scarce and may be found only in scattered and remote sections.

CARIBOU:—These animals are extremely scarce. The herds are few and scattered and reported only in the eastern and western districts of the far northern part of the Province.

ELK (Wapiti):—As stated in previous reports this species has been introduced here by the importation of these animals from western Canada, with the co-operation of the Federal Authorities. Herds were previously liberated in the Nipigon-Onaman, Chapleau, Goulais River-Ranger Lake, Burwash and Pembroke Game Preserves, while transfer was undertaken of some of the animals at Pembroke to Algonquin Park and the Bruce Peninsula. While the animals may possibly be increasing in number nothing of a reliable nature may as yet be stated as to the success or otherwise of this experiment.

RUFFED GROUSE (Partridge):—These birds according to all reports were considerably less than normal in number in practically every section of the Province, particularly the north.

SHARP-TAILED GROUSE (Prairie Chicken):—Found only in extreme north-western and northeastern portions, and there only in reduced numbers.

PTARMIGAN:—Conditions as they apply to this species are very similar to those reported for Sharp-tailed Grouse.

QUAIL:—Generally speaking, these birds may be found only in the extreme southwestern region, principally Essex, Kent and adjacent Counties, and reports indicate some improvement in this area. They are also noted as existing in some isolated spots in a few eastern Counties. The Department liberated live birds of this species, numbering 200 in all, principally in the Counties of Essex, Kent and Middlesex, in which the special open season prevailed.

DUCKS:—About the same as a general rule, with varying conditions in evidence in different sections, i.e. improvement and diminished numbers in intermingled areas.

GEESE:—Good along the James Bay shore, particularly in the vicinity of Moosonee. Conditions about the same along the routes of migration which follow through the north, and thence along the Counties bordering Georgian Bay, Essex and Kent, or through eastern Ontario.

PLOVER and SNIBE:—Neither of these two species is in any way plentiful. Conditions remained about the same in a general way, with slight improvement reported from widely separated areas. Present protective regulations quite necessary.

PHEASANTS (ring-necked):—Through departmental efforts these birds are now well established in the southwesterly Counties, and in the Counties bordering the western part of Lake Ontario. To the east of this they are showing some improvement and increase in number. Details of distribution show that during the year live birds numbering 1,122 were released, for the most part within the Counties in which the limited open season provided, particulars of which are given further on in this report, had prevailed, while 112 birds were taken and transferred from Point Pelee to other sections of Essex County. In addition 17,430 pheasant eggs were distributed to various applicants therefor, which included many settings to Game Protective Associations, to be hatched, and the chicks reared and liberated at the proper time for re-stocking. And again the Department is deeply grateful to those providing such co-operation in the matter of propagating and establishing this fine species of game bird. It is quite probable that this bird is now established in every section in which hope for its continued existence may be held.

HUNGARIAN PARTRIDGE:—The work of establishing this bird has been somewhat limited, and as a result they may be found only in a few scattered sections, where environment is suitable. They are not sufficiently established yet to justify the expectation of noticeable improvement.

WOODCOCK:—While conditions are fairly good in some sections, reports indicate they are not generally prevalent but are found in sufficient numbers for hunting purposes only in a few scattered districts.

RABBITS:—All species, including the cotton-tail, the snow-shoe and the European Hare or Jack Rabbit, are plentiful and provided good shooting during the late fall and early winter in practically all sections of southern Ontario, south of Muskoka, Victoria and Peterborough and east of Hastings. North and east of this, these animals showed quite a decrease in number and are somewhat scarce. In northern Ontario the jack rabbit does not exist, but the other species were scarce west of Algoma, but reported to be plentiful in the eastern section.

At this point reference is made to the special open seasons provided by regulation during the year, details of which follow:—

For deer in the Counties of Grey and Bruce November 18 to 23, and in that part of Carleton County west of the Rideau River, November 5 to 20.

For Moose in the County of Renfrew, November 5 to 20.

For partridge in southern Ontario, October 24, 25 and 26.

For pheasants on Pelee Island, October 23 and 24; and in the Counties of Haldimand, Lincoln, Welland, Durham, Northumberland, Leeds and Prince Edward-Lennox, November 1 and 2.

For pheasants and quail in the County of Middlesex, November 1 and 2.

For pheasants, quail and Hungarian partridge in the Counties of Essex and Kent, November 1 and 2.

Before closing this section of the report mention might reasonably be made of the Regulation which prohibits the feeding of migratory water-fowl for shooting

purposes, and which was effective for the first time during the open season which prevailed this year.

FURS

Conditions as they affect fur-bearing animals throughout the Province, and as they have been reported to the Department, may be summarized as follows:—

BEAR:—Conditions remained about the same. These animals would appear to be fairly plentiful in northern Ontario, and the more northerly parts of southern Ontario.

BEAVER:—Showing some improvement in northerly portion of southern Ontario and in westerly part of northern Ontario, while to the east they are still scarce. The protection of an entire closed season which has been in effect in a large portion of the Province for the past few years was extended to include all of Ontario, so that the trapping of these animals is now prohibited throughout the Province the year round.

FISHER:—These animals are apparently extremely scarce, though there are indications of some improvement in the northerly part of the Province.

FOX:—This species is very plentiful and greatly increased in numbers, particularly in the north. In the southern portion of Ontario they are quite plentiful in the sections to the north and east, though somewhat scarce in the Counties to the west and south.

LYNX:—So far as the northern sections are concerned, while scarce, there is reported to be some slight improvement, particularly towards the east. In the southern section they are extremely scarce, being unknown in many areas.

MARTEN:—While the figures in the subjoined table show a little increase over the figures of the previous comparative period, indications are that this species is becoming scarcer throughout the entire Province.

MINK:—Indications and reports are to the effect that the numbers of these animals are diminishing, and more particularly would this appear to be the case in southern Ontario.

MUSKRAT:—Conditions which govern the welfare of this species have not been at all favourable during the past few years, with the result that these animals are adversely affected. A considerable decline in the catch is indicated by the figures included in the succeeding table, and reports generally indicate a noticeable decrease in all sections, except possibly the eastern section of northern Ontario.

OTTER:—General conditions are about the same so far as Otter are concerned, with possibly some improvement in the northeastern part of the Province.

RACCOON:—This species is practically unknown in northern Ontario. In southern Ontario conditions which apply are not much changed, even though the total catch as reported shows some decline.

SKUNK:—These objectionable little nuisances continue to be very plentiful in practically all sections, and the reduction in the numbers taken may be attributed to the lack of demand for the pelts and the low prices prevailing therefor, which apparently are not sufficient recompense for the trouble and inconvenience trapping of the same entails.

WEASEL:—Continue to be rather plentiful, though their numbers are possibly somewhat reduced. The figures evidence a considerable decrease in the numbers trapped, but as in the case of skunk prevailing prices for the pelts do not encourage operations for the trapping of this species.

SQUIRRELS (black and grey):—These animals are reported to be on the increase in southern Ontario, especially in the western and eastern Counties. Their numbers were sufficient to warrant a two-day open hunting season south of the French and Mattawa Rivers and Lake Nipissing, i.e. on October 24th, and 25th.

Operations by licensed trappers are carried on very intensively throughout Ontario during the periods of the various open seasons, and in a general sense the fur-bearing animals native to the Province are as a result encountering more than a little difficulty maintaining the several species at levels existing in recent years. Restrictive regulations imposed for their protection, particularly in the way of closed periods, undoubtedly require continuation, and the active co-operation of all concerned in observing and complying therewith is urgently needed.

The following comparative table shows the numbers of pelts of the different species of fur-bearers exported from the Province and dressed within the Province during the years 1933, 1934 and 1936, and upon which royalty was paid as required by the Game and Fisheries Act.

	1932-33	1933-34	1935-36
Bear	556	341	411
Beaver	10,799	10,336	6,785
Fisher	1,203	1,297	2,137
Fox (cross)	1,495	2,224	5,424
Fox (red)	9,198	13,534	37,044
Fox (silver or black)	132	280	500
Fox (white)	82	89	883
Fox (not specified)	111	85	495
Lynx	1,400	2,138	2,642
Marten	1,376	1,096	1,282
Mink	52,795	63,615	47,057
Muskrat	637,348	521,751	398,043
Otter	3,264	3,330	3,701
Raccoon	12,109	18,673	13,259
Skunk	67,797	73,721	50,747
Weasel	92,036	68,164	42,643
Wolverine	3	5	4
	891,704	780,679	613,057

Based on the average prices as computed by the Department from information secured from reliable sources, the value to the trapper of the fur catch of the 1935-36 season is estimated at \$1,906,121.04, appreciated values accounting for the increase over the previous comparative period. These figures do not take into consideration silver, black and blue foxes and mink the product of our licensed fur farms, the pelts of which animals are exempt from the royalty provisions of the Game and Fisheries Act. During the year reported upon a total of 21,318 silver and black fox pelts were either exported from the Province or tanned, as well as 15 blue fox pelts and 9,641 mink pelts. The estimated total value of all these pelts was \$827,451.11, which, of course, accrued to fur farmers licensed under the regulations which govern such operations.

FUR FARMING

At this time a short resume of this branch of industry in Ontario during the past few years, as well as its present status should be of interest.

Following the economic conditions which developed in 1930, values declined severely, forcing a revaluation and a corresponding reduction of breeding stocks on fur farms. 29,331 animals were pelted in 1931, as compared with 13,140 in 1930; 8,149 in 1929; and 5,427 in 1928. The increase over the normal production further adversely influenced prices in the fur market and caused some severe financial losses to individuals. There were, however, some factors which compensated the industry as a whole. In the process of reduction, the quality of breeding stocks was improved, creating a new standard of excellence. The lower values of breeding stocks attracted additional capital and new farms were established. While the reduction of breeding stock continued, the number of farms actually increased until a peak was reached in 1931, when 1,609 farms were licensed. A slight annual decline subsequently developed until 1934, when only 1,217 farms were licensed. The industry is again showing progress both in the number of farms and the breeding stock kept. There were 1,239 farms licensed this year and breeding stocks increased by eighteen per cent. The propagation of mink is now commanding considerable attention, live stock having increased almost fifty per cent, whereas the silver fox, the other principal species, increased only twelve per cent.

SUMMARY OF BREEDING STOCK ON LICENSED FUR FARMS AS AT JANUARY 1ST

	1934	1935	1936
Beaver	60	78	70
Fisher	18	19	16
Fox (cross)	443	434	367
Fox (red)	360	286	228
Fox (silver or black)	16,826	19,314	21,645
Fox (blue)	10	10	5
Lynx	2	2	2
Mink	6,190	8,605	12,332
Muskrat	499	447	375
Raccoon	989	799	524
Skunk	2	0	3
Bear	14	11	21
Marten	22	9	4

The work at the Experimental Fur Farm continued, and the following is a short summary thereof:—

EXPERIMENTAL FUR FARM

Further investigations were carried out regarding the feeding of raw cereals to pup foxes after weaning at around eight to nine weeks of age. It was found that in an uncooked stage raw cereals were not only very improperly digested but that they were actually detrimental to the health of the pups. Scouring, bloating and intestinal disorders could be traced directly to this source. Once the raw cereal-fed pups were placed on a diet containing thoroughly cooked cereals these objectionable symptoms entirely disappeared.

Due to the number of enquiries from mink ranchers regarding the substitution of fresh meat and fish with dehydrated products, like meat meals and fish meals, feeding experiments were carried out to attempt to ascertain how far this might correctly be done. A summary of these experiments shows that fresh products cannot be entirely replaced by dried ones. Where animals were fed fish meals there was a steady decline in the haemoglobin of the blood resulting in nutritional anaemia. If liver meal was added to the fish meal diet the anaemia was arrested and finally disappeared. This was also the case with meat meals unless one third of the ration consisted of liver meal.

Apart from the nutritional condition of the animals there was a distinct tendency for the fur to be dry and scanty. It appears that quantities of fresh food must be fed to fur-bearing animals if the best results are to be obtained. Particularly does this apply to breeding stock, for if females are fed mainly on dried products they may breed and give birth to pups but they will invariably dry up during the lactation period and many pups will die at the fourth week as a result.

During the summer, regional meetings were held at Guelph, Owen Sound, Arnprior, Ridgeway and St. Mary's which were well attended and many and varied discussions arose during these meetings. In October a Field day was held at the Experimental Fur Farm at which time the foxes and mink were judged for quality and value by competent authorities on the subject. This meeting was highly successful and breeders attended from all parts of the Province.

CROWN GAME PRESERVES

The idea of Crown Game Preserves had its origin in the desire to protect and perpetuate the natural wild life resources of the country. The Department has not been slow in recognizing the value of protected areas for the natural propagation of game, and has continued to give increased attention to this phase of its conservation programme. In Northern Ontario, where the population is still sparse, and big game as a consequence more abundant, advantage has been taken of the fact that much Crown Land was available and large areas were in previous years established as Game Preserves. The ten largest of these, viz;—The Abitibi, Burwash, Chapleau, Goulais River-Ranger Lake, Lake of the Woods, Mississauga-White River, Nipigon-Onaman, Nipissing, Pipestone Lake and Superior, represent a total area of approximately 8,593 square miles. At the present time there are some 84 Crown Game Preserves in the Province, representing a protected area of close to six million acres.

During the period under review the Department has extended its game preserve policy to include a larger portion of southern Ontario. It is intended with the co-operation of private land owners to set aside as Game Preserves a number of small areas, each of about one thousand acres or so, located at strategic points in each County. While all species of game will be protected in these areas, they will be primarily useful as refuges for game birds, (migratory and non-migratory). The underlying idea in connection with these small Preserves is the same as in the case of the larger areas where big game is being successfully propagated. Given protection for a period of years game birds and animals, provided there is a foundation stock in the area, will increase in numbers and the overflow will serve to populate the surrounding districts. Fourteen of these Preserves have already been established in various Counties, (see tabulation). All of these areas are well suited for the purpose and most of them are already supplied with upland game birds. It is the intention of the Department however, to place the larger portion of its available adult birds on these Preserves for re-stocking purposes.

It is generally acknowledged that where the wild life is allowed to propagate with a minimum of human interference and in surroundings which provide natural food and cover, there will in time be a return to the normal conditions set up by nature. This means not only increased game in the protected areas but a general improvement in conditions throughout the Province.

So far as the general public is concerned these Preserves serve a dual purpose. From the standpoint of the sportsman they provide more game of all kinds and therefore better hunting. For those whose chief pleasure in the wild life is aesthetic, Crown Game Preserves will increase their pleasures by providing havens for the different species where they may be found in their natural state. In addition they will ensure that future generations will not be deprived of either the recreational or the aesthetic advantages which we now enjoy.

The following tabulation shows the Preserves added during the year in addition to several which have been either renewed or amended.

Name	County	Extent in Acres
x: North Easthope	Perth	8,300
x: Wilder Lake	Grey	4,480
x: Woodlands	Halton	460
x Decew Falls (formerly Power Glen)	Lincoln	2,000
Camden	Kent	300
Dresden	Kent	1,200
Colchester South	Essex	800
Tilbury West	Essex	1,200
Cultus	Norfolk	600
Enniskillen	Lambton	1,100
Erin	Wellington	800
Horner	Oxford	2,400
Komoka	Middlesex	500
Strathroy	Middlesex	1,000
Newbury	Middlesex	1,600
Malahide	Elgin	1,000
Murray	Northumberland	680
Stamford	Welland	1,100

x:—Renewed
x —Amended

WOLF BOUNTIES

During the year under review, 1935-36, 2,004 claims for bounty, involving the pelts of 2,905 wolves, were dealt with. Rather more than fifty per cent of these wolves were killed in the four western districts of northern Ontario, of which about sixty-five per cent were brush wolves. A slightly higher ratio of timber wolves was taken in Algoma, Sudbury and Nipissing Districts, while only twelve per cent of these animals which were taken in the District of Cochrane were brush wolves. The following table details the sources of origin of the pelts submitted for bounty:—

SUMMARY OF PELTS

District or County	No. of Adult Wolves		Number of Pups	Total
	Timber	Brush		
Algoma	124	157	7	288
Bruce	12	9	0	21
Cochrane	37	5	0	42
Frontenac	7	1	0	8
Haldimand	1	3	0	4
Haliburton	18	0	0	18
Hastings	8	1	6	15
Kenora	225	447	1	673
Lanark	5	1	0	6
Lennox & Addington	11	0	0	11
Manitoulin	27	130	4	161
Muskoka	9	5	0	14
Nipissing	79	42	5	126
Norfolk	0	4	1	5
Ontario	1	3	0	4
Parry Sound	89	16	1	106
Patricia	88	136	2	226
Peterborough	3	1	0	4
Rainy River	125	231	1	357
Renfrew	27	1	0	28
Simcoe	12	6	0	18
Sudbury	108	168	0	276
Thunder Bay	138	336	5	479
Temiskaming	4	7	0	11
Victoria	1	1	0	2
York	0	2	0	2
Total	1,159	1,713	33	2,905

Seventeen claims were not granted including 20 pelts of dogs and other animals which were not eligible for bounty.

Following is a comparative table of wolf bounty statistics covering the three last complete financial years:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending October 31, 1933...	1,112	1,229	43	2,384	\$53,433.88
For year ending October 31, 1934...	990	812	57	1,859	27,080.65
For year ending March 31, 1936....	1,159	1,713	33	2,905	42,399.89

Of the 1935-36 amount shown above, viz:—\$42,399.89, \$41,995.00 was the amount paid for bounty. Details of bounty paid are as follows:

Brush Wolves (Counties)	30	@ \$ 6.00	\$ 180.00	
(Districts)	1,666	@ \$15.00	\$24,990.00	
Total Brush	1,696			\$25,170.00
Timber Wolves (Counties)	73	@ \$ 6.00	\$ 438.00	
(Districts)	1,084	@ \$15.00	\$16,260.00	
Total Timber	1,157			\$16,698.00
Pups (Counties)	1	@ \$ 2.00	\$ 2.00	
(Districts)	25	@ \$ 5.00	\$ 125.00	
Total	26			\$ 127.00
Total	2,879	pelts		\$41,995.00

In respect to wolves killed in provisional judicial districts, bounty was paid by the Provincial Treasury, but for wolves killed in Counties it was paid by the County Treasury, of which forty per cent was rebated by the Province.

ENFORCEMENT SERVICE

Perhaps one of the most important services provided by the Department is the work of maintaining adequate respect for and proper observance of provisions of the Game and Fisheries Act and the regulations provided thereunder, as well as the various regulations applicable to Ontario adopted under the Fisheries Act, (Federal) and the Migratory Birds Convention Act. Generally speaking, this branch of activity is assigned to the members of the Field Service Staff, whose regular numbers were augmented by the appointment of additional Seasonal Overseers for special duty during the hunting seasons, and also during the critical fish spawning periods. This work is also included among the duties performed by members of the Provincial Police Force, a policy which was inaugurated during the latter part of 1934, and which assistance has been of considerable value. A word of appreciation may be expressed for the co-operation in this work which is provided by the many Deputy Game and Fishery Wardens, whose interest in the preservation of our game and fish resources is sufficient to encourage them to volunteer their services without remuneration, and who under such appointments are authorized to act in the capacity of enforcement officers for purposes of the Game and Fisheries Act. During the calendar year 1935 Deputy Game and Fishery Warden appointments totalled 836, and one hesitates to estimate the value of the service and co-operation the Department received from these honorary officers, and the least that may be said is that it would be difficult to replace or duplicate the services which they rendered.

Notwithstanding the fact that these enforcement services are provided, there are still those who, in the case of the Game and Fisheries Act as in the case of other regulatory legislation, will either knowingly or otherwise infringe and who therefore are confronted with inconvenience and difficulty if contacted by the enforcement service when the violations occur.

During 1935-36 there were 1,216 cases in which offences were committed and in which the offenders were relieved by various officers of their equipment and the unlawful game or fish which might have been in their possession on these occasions. An examination of the reports of these seizures of equipment and goods shows that in 987 cases action was provided by Game and Fisheries Overseers; in 144 cases by Deputy Game and Fishery Wardens; in 36 cases by members of the Ontario Provincial Police Force and in 46 cases by co-operative action, Overseers, Deputy Game Wardens and Provincial Police working in conjunction with each other; while in three cases the action was taken by Municipal Police.

A condensed summary of the articles thus seized is submitted herewith:—

Description	No.
Fire-arms and ammunition	440
Fishing equipment	308
Fish	197
Game	154
Pelts	121
Trapping equipment	118
Angling equipment	62
Water craft	38
Lights (artificial)	37
Live animals	16
Motor vehicles	9
Miscellaneous	42

Duplicate entries on one seizure, such as fire-arms and game; Angling equipment and fish; trapping equipment and pelts; and other combinations of a similar nature account for the apparent discrepancy in the total of the above table, viz.—1,542 as compared with the 1,216 actual seizure reports.

Departmental records contain evidence of the fact that during the year under review there were some 967 cases in which offenders against our legislation and regulations were prosecuted in the courts, and in which convictions were registered against such offenders. As in the case of the actual seizures these court cases were somewhat varied as to origin, as follows:—In 806 cases Game and Fisheries Overseers were responsible for the prosecution; Provincial Police in 51 cases; Deputy Game and Fishery Wardens in 42 cases, and in 66 cases the prosecutions were by Overseers, Deputy Game Wardens and Provincial Police acting in conjunction with each other; while in 2 cases Municipal Police undertook the action.

REPORT OF THE FISH CULTURE BRANCH

Ontario's commercial fishing industry is an important factor in our industrial life. In point of annual marketed value of production Ontario stands first among the provinces. In the four year period 1926-1929, before the world-wide disruption of economic conditions was felt, the average marketed value of Ontario's fish was \$3,693,000. In the four year period, 1930-33, the average marketed value of the catch was slightly in excess of \$2,500,000 and in 1934 the marketed value was \$2,316,965., and in 1935, \$2,633,512.90. These figures are cited to emphasize the value of our commercial fishing industry, the hopeful signs of recent increasing values and the importance of maintaining this industry on a proper basis.

On the other hand, Ontario's game-fishing interests are vitally important to every person in the Province, and the conservation of these interests is becoming of practical concern to increasing thousands of our citizens. This is not difficult to explain, when we consider the recreational and health advantages, and the direct and indirect financial benefits of a large and ever-increasing tourist trade, embracing as it does in one way or another every branch of industry, thus increasing employment. It is estimated that 10,800,000 tourists from the United States and other countries entered Canada in 1935, and left behind \$200,000,000. in cash; of this total Ontario received \$84,000,000. Emphasis is placed on the importance of the tourist trade, for it is generally conceded that the chief attraction to the tourist is our excellent fishing.

There are many complex factors involved in the maintenance of fisheries interests and a few of the more important may be cited:

1. Scientific inquiry.
2. Re-stocking measures of a practical nature.
3. Protection.
4. The spread and development of the ideals of true sportsmanship.

All these factors are inseparably linked together in the problem of fisheries management.

HATCHERIES AND REARING STATIONS:

The Department operates twenty-two fish cultural stations. This number includes all the major and subsidiary rearing stations. The actual number of hatcheries is nineteen; trout rearing stations, nine; bass rearing stations, three; in addition to the facilities for hatching bass in the Lake on the Mountain, Glenora Hatchery.

During the year, a new trout rearing station was built in the vicinity of Chatsworth, comprising the hatchery for hatching and culture to the advanced fry stage, and four rearing ponds, all of which are separately fed and drained. Two excellent sources of spring water supply the hatchery and ponds, and a very important advantage in the arrangement is that the hatchery supply and the supply to the main rearing ponds are separate. The water itself is of satisfactory composition and of low and approximately constant temperature 45°F. The total volume of water delivered is approximately 2100 gallons per minute. The constant and relatively high winter temperature induces early hatching, so that the fish are strong and well advanced for transfer to the rearing ponds in early summer.

The Department acquired a series of four ponds at Midhurst Reforestry Station. These were renovated and trout carried over winter. Additional improvements will be made on these ponds next year.

SPECKLED TROUT:

The Department's objective is to increase the number of sizable trout distributed to suitable waters year by year. This is necessary if we are to maintain the supply on account of the increasing intensity of the fishing. Furthermore, there are numerous streams in southern Ontario, in which the food supply for trout fry and fingerlings has diminished and cannot meet the requirements imposed on the stream by the introduction of additional supplies of baby fish. This condition is due to the rapid industrialization of the Province by agricultural, lumbering, manufacturing, and other interests, all of which have been instrumental in changing the character of our lakes and streams. It is clear to anyone, for example, how effective scouring freshets, and bulging streams heavily laden with silt are, in changing the quantity and quality of the food supply. During prolonged periods of drought, also, the shallow muddy shoals and backwaters, the home of minute life on which

young trout feed, become dried up. It is clear, therefore, that under such circumstances planting yearling and older fish which feed on the larger forms of terrestrial and aquatic life, insects, shellfish, and fish will have a better chance to survive. It is true that if fry and small fingerlings are carefully distributed in protected headwaters, a percentage will survive, but we may plant yearlings in the main streams of creeks with much greater impunity and with greater hope of success since fish of this age can more easily search out favourable sections of the stream for food and shelter. There are numerous lakes, also, where on account of the limitations of food supply, the planting of fry and fingerlings is undesirable. For example, lakes with both shallow and deep water, should produce more trout food for immature and mature trout than those with precipitous shores, where the shallow water fauna are extremely limited. In the latter case the planting of larger trout is desirable.

We must remember that the productiveness of any natural body of water is fixed by nature and our objective is to prevent fishing from reaching a low level. When a body of water becomes depleted to too low a level the increase of undesirables often goes on to such an extent that it becomes increasingly difficult for trout, especially young trout, to survive. The introduction of yearling and older trout, in such cases, is obviously a more practical procedure.

The following table illustrates the progress being made in the distribution of larger trout to suitable lakes and streams throughout the Province:

Length in Inches	1934	1935
3 to 7 inches	913,315	2,464,987
4 to 9 inches	19,538	.....
4 to 16 inches	3,876	189,156

BROWN TROUT:

Brown trout are native to lakes and streams in the temperate portions of Great Britain, France, Germany, and other central European countries. The Loch Leven trout is a form of brown trout inhabiting Loch Leven in Scotland.

Brown trout have been introduced and are now fairly abundant in certain waters of the Great Lakes watershed. They have been propagated in Michigan since about 1880. Most of the early plantings of brown trout were in the fry stage, as a result of which they are now rather widely distributed especially in the lower peninsula. Brown trout are now being reared to the fingerling stage in Michigan and good results are claimed from these plantings to date. Brown trout are also established in the more southerly sections of Wisconsin and Minnesota, and also in New York State.

Conditions suitable for brown trout are closely parallel to those suitable for speckled trout, excepting that brown trout according to the experience of those best qualified to judge will endure much higher water temperatures than speckled trout, and hence are valuable for re-stocking lower stretches of streams which are no longer suitable for the latter on account of temperatures in excess of 75°F.

In a biological survey of the Genesee River system, in New York State, it was observed that with few exceptions brown trout were found in every stream inhabited by brook trout. However, in the colder brook trout streams, showing temperatures below 65°F. they were rarely encountered. They reached maximum size and abundance in streams ranging from about 68 to 75°F., and occurred in many others attaining temperatures as high as 80°F.

Our policy, and the general consensus of opinion of those who have had experience with this trout in America is that it should not be introduced into any waters where conditions are still suitable for native speckled trout, as experience

has shown that the brown trout become predominant, eventually, and replace brooks. They not only compete with brooks for food, but they spawn about the same time and are known to monopolize the spawning beds.

The lower reaches of many streams in southern Ontario do not possess suitable conditions for speckled trout. The headwaters of some of these streams, still provide suitable conditions for a limited number of small trout, but, on the whole, they could be more profitably stocked with browns. After careful survey and selection, a number of promising streams have been stocked in old Ontario and favourable reports have been received on some of these.

Brown trout are much more notional in their feeding habits than our native trout and hence are not so easily taken. They are considered a night feeder, and probably the best catches are made about dark, although there are many exceptions and good catches have been made during the day time. In view of the difficulties experienced in catching brown trout, they withstand heavy fishing pressure, and hence are valuable for re-stocking waters in populated areas.

There are several examples which testify to the fact that brown trout will live in lakes, but on account of the difficulty of capture in such an environment, from the standpoint of sport fishing, re-stocking seems impracticable. However, for the purpose of establishing natural sources of supply for brown trout eggs, the introduction to suitable and controlled areas is worth a trial. This was the Department's objective in re-stocking Brewer Lake, in Algonquin Park, as noted in the report of the Department for 1934.

A biological study of the lake was first carried out by setting test gill nets, etc., to determine the inhabitants of the lake, their relative abundance and their feeding habits. The lake was then intensively netted for mature trout, predatory and competitive fish. The catch was chiefly comprised of lake trout, speckled trout, suckers and ling. When the netting was completed, the outlet of the lake was suitably screened off and brown trout introduced. In addition to favourable biological features, the lake is also accessible and easily controlled.

RAINBOW TROUT:

A study similar to that conducted for brown trout was made on Costello Lake, located immediately below Brewer Lake and into which Brewer Lake drains. After screening the outlet, rainbow trout yearlings were planted directly into suitable parts of the lake and fingerlings were planted in the stream connecting Brewer and Costello.

The object of this work is to establish, if possible, a source of supply for collecting spawn in order to overcome the expense incurred in retaining domesticated stock in ponds.

The rainbow trout distributed in our waters show a strong migratory instinct to drop down to larger waters while they are yet immature. In this way they become lost to the stream in which they were originally planted, except during their return for spawning purposes. During the year fingerlings have been distributed in ponds, lakes and streams where the best possible results may be obtained. Care was taken to plant the rainbows in waters where spawning facilities were available and tributary to larger suitable waters.

As an illustration of some success of the introduction of rainbow trout, may we quote the result of planting rainbow trout fingerlings in Burnt Lake, Townships of Sherbourne and McClintock, District of Haliburton, in 1932:

"The development of Rainbow Trout in this water has been most satisfactory and the following is a record of fish taken during 1934, 35: J. M. Guide—5 from 15 to 18 inches long; B. B., Dorset—1, 2 ¼ lbs. in weight; A. M., Dorset, 3 about 16 inches long; A. T. W., Dorset, 3 about 16 to 18 inches long; L. R., Rochester, N.Y., 5 that were weighed at Robertson's stores and averaged 2 ½ lbs."

We have a supply of fall spawning rainbow trout breeders but how closely they will follow the fall spawning habit is questionable. It is reported officially, however, that this particular strain has a tendency to remain in the waters in which they are planted; they grow rapidly and withstand high temperatures. Spawn will not be collected from these fish until the fall of 1937, when they will be three years old. If any revert to a spring spawning habit, they will be segregated.

KAMLOOPS TROUT:

This species, described in a previous report, was introduced for the first time to a few specially chosen waters and these plantings will be carefully followed up to determine the results.

Kamloops trout spawn in streams and in lakes on bars at the mouths of spring streams. Although these fish do not spawn until April, May, or June, they are cultured similarly to speckled trout and in British Columbia live and thrive in waters suitable for speckled trout.

LAND-LOCKED SALMON:

The land-locked salmon or ouananiche was described in a previous report. The Department succeeded in planting 13,648 yearlings in specially chosen waters, and the results of these plantings will be carefully followed up. Lakes suitable for lake trout were chosen, since a closely related form thrives exceedingly well in a lake trout environment. The ouananiche, the chief centre of which is Lake St. John in Quebec, spawns in tributaries to that lake.

LAKE TROUT:

The number of eyed lake trout eggs distributed, set forth in the report November 1st, 1934 to March 31st, 1935, was nearly five times the number distributed in 1934.

More than six times as many fry were distributed in 1935 and over one million were planted in inland waters.

Half a million more fingerlings were distributed as compared with the previous year and nearly half the total distribution of lake trout fingerlings was planted in inland waters, thereby succeeding in the drive prophesied in the preceding report.

WHITEFISH:

Including that quantity of whitefish distributed between November 1st, 1934, and March 31, 1935, there was an increase in the 1935 planting amounting to slightly more than 13 per cent.

It should be stated that this distribution was exceeded only in 1924 and 1927.

HERRING:

There was an increase of 66.4 per cent. in the distribution of herring fry over that of the previous year, including one hundred thousand included in the report of the five months, November 1, 1934, to March 31, 1935.

YELLOW PICKEREL:

There was a decrease in the distribution of pickerel fry to the extent of approximately 48,841,000 due to an unsatisfactory run of pickerel in the Bay of Quinte.

Large numbers of fry were distributed to suitable inland game fishing areas.

SMALL-MOUTHED BLACK BASS:

There was a percentage increase in fry distribution over the previous year amounting to approximately 47 per cent. The Department was also successful in distributing more than four times as many fingerlings, that is an increase of over one hundred and seventeen thousand, in addition to 3,435 yearlings and adults, as compared with 420 adults in 1934.

LARGE-MOUTHED:

From one pond devoted to the culture of this species at the Mount Pleasant Hatchery, 130,000 fry and 2,153 fingerlings were distributed.

MASKINONGE:

As a result of the Department's operations on the Pigeon River at Omemee, 460,000 maskinonge fry were distributed to suitable waters.

The chief difficulties attending our operations this year were adverse weather conditions, that is sudden lowering of temperature from a gradually rising one and, also, the scarcity of ripe males and females. Abundance of eggs and a small amount of milt results in high fertility.

We have already discussed the unsuccessful attempts made on this Continent to rear maskinonge to the fingerling stage in appreciable numbers. Millions of fry have been produced in New York and Wisconsin hatcheries and Ontario can do likewise when sufficient spawning fish are available and when favourable spawning and hatching temperatures are actualities.

SANCTUARIES:

There is a tremendous demand for more and more black bass and maskinonge for maintaining the supply in our inland waters, since both of these species have a very great appeal to anglers. Our rearing ponds and hatcheries are doing good work, but considering the extent of Ontario's bass and maskinonge waters and the enormous resident and non-resident fishing population, we can scarcely hope to produce an adequate number of these species by pond culture to close the gap between supply and demand.

In addition to the imposition of suitable closed seasons, sane creel limits, the control of competitive and predatory species, and pollution, there is probably no more promising method of bass and maskinonge conservation than the establishment of sanctuaries, that is setting aside in certain suitable waters, a number of bays in which fishing of any kind is prohibited. The bass and maskinonge multiply in these areas without interference and spread to other parts of the said lake or stream, thus preventing depletion. By such means we may be approaching the ideal of maintaining a permanent breeding stock and taking each year only the natural increase from it.

In many areas of this kind maskinonge and large-mouthed black bass live and thrive. In many, also, there are mixed environmental conditions, so that small-mouthed black bass is a frequent inhabitant also. Closures of this nature will be followed up from time to time to determine the results and if there are deficiencies in these closed areas, we propose to remedy them, if possible. For example, condi-

tions in certain areas may be vastly improved by eliminating useless competitors or enemies, and a number of areas may show distinct possibilities for rearing lunge and bass under controlled natural conditions.

In view of an ever-increasing tourist trade, fishing for bass and maskinonge is becoming more and more intensive and considering the accessibility the ease and speed with which many of our waters may be invaded, it becomes increasingly evident that sanctuaries of this nature are necessary.

It is difficult to draw any hard and fast line between sanctuaries and closed areas enumerated below. In many of these and in many waters formerly closed, the sanctuary principle is evident. In many instances, however, the object of closure of an entire body of water is for stock and supply. Such an area is closed permanently to public fishing, so that quantities of bass may be removed each year by harvesting methods for re-stocking suitable waters in the vicinity. This type of closure is slightly different from the principle embodied in establishing sanctuaries but the same objective, namely practical re-stocking, is involved.

CLOSED WATERS:

The following waters were closed to all fishing during the year for the purpose and for the period specified:

Creamery Creek and Trout Rearing Pond in Harrison Park, Owen Sound—

Located in the Township of Derby, County of Grey,—closed until May 1st, 1939, for brown trout propagation.

North Lakes or Gravel Lakes and their connecting streams and Creek flowing from Fourth Gravel Lake to Whitefish Lake—

Located in unsurveyed territory west of the Township of Strange, District of Thunder Bay,—closed until August 22, 1938, for speckled trout propagation.

Silver Islet Creek—

Located in the Township of Sibley, District of Thunder Bay,—closed to all fishing until September 11, 1937, for speckled trout propagation.

A large number of waters were closed in 1936, and for information concerning these the Game and Fisheries Laws should be consulted.

REMOVAL OF COARSE FISH:

Between April 1, 1935, and March 31, 1936, hoop nets and trap nets were operated in the following lakes in Leeds and Lanark Counties, namely: Bennett, Christie, Pike, Otty, Rideau, Crow, and the Mississippi River, and a total of 1,818 ling were removed. Taking five pounds for the average weight of the ling from all of these lakes, 9,090 pounds were removed. Adverse weather conditions slowed up the work to a considerable extent. Blocked roads in the district prevented our officers from getting to the lakes as effectively as during previous winters when such work was undertaken.

Similar work was conducted on Lake Manitou, Manitoulin Island, where gill nets were set and a total of 2,416 pounds of ling were removed; the average weight of the ling was 4 lbs. *5060' wgt*

In order to have a more complete picture of the removal of ling from our inland waters, reference should be made to the report for the five month period, November 1st, 1934, to March 31, 1935.

WATER LEVELS:

In view of the shallowness of the water in which maskinonge, pike, black bass and forage fish spawn, sudden fluctuations in water levels over natural spawning beds are inimical. The Department has appealed to all those responsible for such operations and the Department of Railways and Canals was supplied with the following data on the waters on which they operate dams for power and navigation purposes, namely, the fish frequenting the waters, the spawning dates of the various species and the spawning depths. As a result we look for definite improvement along these lines. Judging from information received from our field officers, considerable improvement is evident.

NUTRITION OF TROUT:

During the fall, winter and spring of 1935-36 a number of feeding experiments were conducted in the Department's experimental hatchery in the Parliament Buildings, Toronto. The object of these experiments was to find a suitable food or mixture of foods that would produce healthy and vigorous trout at a lower cost than the food generally used, namely beef liver.

Previous investigations of this nature have been conducted by the Department and a short account of this was given in a report of December 21, 1935, entitled 'Ontario's Problems in Fisheries and Status of Research,' published in the proceedings of the Conference on Fresh Water Fish Culture, Ottawa, January 3rd, 1936.

The experimental hatchery contains four large glass aquaria 5' x 3' x 26" of water; six galvanized iron troughs, 2'4" x 6" x 6" of water; and four troughs, 5' x 10½" x 5" of water. (The small galvanized iron and wooden troughs were painted on the inside with paraffin varnish). Thus the experiments were divided into three groups and in each unit of each group, similar conditions prevailed. In each group a control unit was set up in which beef liver was used as a standard for comparison with the other feedings. Two per cent. by weight of cod-liver oil was added to all feedings. The diets used are tabulated below, indicating any changes made during the course of the experiments.

The diets used in the experiment and the percentages of the various constituents were as follows:

	Diet No.	Food	Percentage		
Group A Glass Tanks	1	Beef Liver	100		
	2a	Beef Liver Alewives	75 25		
	2b	Beef Liver Alewives	50 50	Feb. 3/36	
	3a	Beef Liver Soybean Meal	75 25		
	3b	Beef Liver Soybean Meal Pigmeal	40 10 50	Jan. 31 — 50	Feb. 4 50 10 40
	4	Beef Liver Pilchard Meal Ling	50 25 25	Sucker substituted for Ling April 27, 1936.	

	Diet No.	Food	Percentage	
Group B Tin Troughs	5	Beef Liver	100	
	6	Beef Liver Salmon Egg Meal	75 25	Lake trout egg meal used until Jan. 10th when salmon egg meal arrived.
	7	Beef Liver Pilchard Meal	75 25	
	8	Beef Liver Beef Heart Salmon Egg Meal Fish Mixture	20 14 17 34	Lake trout egg meal substituted for salmon egg meal until Jan. 10/36.
	9	Beef Liver Beef Heart Pilchard Meal Fish Mixture	20 14 17 34	
	10	Beef Liver Hog Melts Pilchard Meal Fish Mixture	25 25 25 25	
Group C Wooden Troughs	11	Beef Liver Hog Melts Ling	50 25 25	
	12	Beef Liver Hog Melts Fish Mixture	50 25 25	
	13a	Beef Liver Hog Melts	75 25	Jan. 18, 1936
	13b	Beef Liver Hog Melts Salmon Egg Meal	50 25 25	
	14	Beef Liver	100	

The fish mixture referred to was a mixture of equal weights of the flesh of the common sucker and ling. In the case of the alewife and gizzard shad, the entire fish was ground up.

Each unit of each group was fed the same weight of food and the amount fed was regulated in such a way that a minimum of uneaten particles was left on the bottom of the tank or troughs. Since there is no accurate way of measuring this waste food and since it was fairly uniform in each unit of each group, it was not included in the calculations.

At regular intervals the fish were weighed and the weight increase for that period was obtained. From this, the increase in weight for 100 fish could be

calculated and by taking the total increase in weight per 100 fish for the duration of the experiment and dividing it into the total amount of food fed per 100 fish the number of grams (or pounds) of food required to produce one gram (or pound) increase in weight of the fish was determined. This figure is called the 'efficiency factor.' Naturally, the lower this figure is, the more efficient the food.

Summarizing the details of the experiment we have the following results:

1. Diets 3a and 3b cannot be considered since, after feeding for a period of 132 days the fish began to die from an intestinal disorder which could only be blamed on the diet.
2. Diet No. 4 cannot truly be compared with the other diets of group A, since rainbow trout were fed, whereas the other diets of the group were fed to speckled trout. A different growth rate would be expected. However, it should be stated that these fish progressed in health and weight very satisfactorily and there was every reason to believe that the diet was a good one.
3. Diets 2a and 2b excelled diet No. 1, namely the liver control, as shown in the following table:

Diet No.	Cost for one pound increase in fish weight	
	Diets 2a and 2b and 2a+2b	Liver Control for same Period
2 a	62.5c	84.0c
2 b	69.2c	107.1c
2a+2b	67.4	95.5c

4. In Group B the diets appear in the following order from the standpoint of economy, namely, 8, 10, 7, 9, 6, and 5 (liver control).
5. In Group C diet 13a is the only one that showed any improvement over the liver control diet No. 14. The addition of salmon egg meal to this diet apparently proved uneconomical in this case.
6. Diet 2 appears to have excellent possibilities as an economical trout food. In view of the absence of suitable refrigeration facilities, at trout rearing stations, the use of raw fish products as food, during the summer months, is surrounded by many practical difficulties. During the winter, this difficulty can be overcome to a considerable extent, but there is the additional difficulty of keeping the fish in a wholesome condition for long periods. Processing the whole fish into a meal is a practical way of handling this food, and obviates the possibility of transferring fish parasites in the raw fish food. We have had several tons of alewives processed and found the meal mixed with raw beef liver equally as good as the fresh fish. The question of drying the fish has been considered, but this method has not been used to date, for the reason that quantities of alewives were difficult to obtain during that period when air drying would be most practicable.

Diet 13a should also be considered as well as the diets of Group B. Diets 8, 9, and 10 of this group include fresh fish and would present the same problem regarding preservation as diet 2. Diets 6 and 7 do not present these difficulties.

ACKNOWLEDGMENTS

In conclusion I desire to publicly express my appreciation of the assistance and support received by the Department from many sources during the year 1935-36.

Our work, which at times may be somewhat difficult and perhaps onerous, has been made the more pleasant and enjoyable by reason of the continued co-operation of interested persons and the various Fish and Game Protective Associations which

exist throughout the Province, and the personal contacts of myself with the officers and members of many of these organizations, and the assurances derived therefrom, are an evidence of the fact that the genuine sportsmen of this Province are interested in the work of the Department in every line of its endeavour, and more particularly in the policy and practice being followed to ensure a perpetuation for the mutual advantage of all our people of the wild life natural resources of this Province.

Mention might also be made of the fact that generally speaking, members of the staff, both the inside and the outside service, have conducted themselves and performed the duties assigned to them in the best interests of the Department and its varied activities.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

Toronto, March 10, 1937.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36

LARGE-MOUTHED BLACK BASS		Bruce—Cont.	
FRY		Cyprus Lake	2,500
Bruce:		Gould Lake	10,000
Boat Lake	5,000	Lake Isaac	5,000
		Sauble River	10,000
Durham:		Carleton:	
Lake Scugog	15,000	Rideau River	25,000
Muskoka:		Elgin:	
Butterfly Lake	5,000	Pinafore Lake	10,000
Leach Lake	5,000	Union Pond	5,000
Norfolk:		Frontenac:	
Little Lake	5,000	Antoine Lake	5,000
Parry Sound:		Bull Lake	5,000
Crawford Lake, also called		Collins Lake	5,000
Otter Lake	5,000	Crow Lake	2,500
Deer Lake (Lount) also		Loughboro Lake	10,000
called Ferry Lake	5,000	Mississagagon Lake	5,000
Peterborough:		Reed's Lake	5,000
Round Lake	10,000	Sharbot Lake	10,000
Pearson's Lake, also called		Sydenham Lake	2,500
Wright's Lake	5,000	Grey:	
Simcoe:		Saugeen River	25,000
Boyne River	10,000	Wilcox Lake	5,000
Little Lake (Tay Tp.) ...	25,000	Hastings:	
Lake Simcoe	15,000	Crow Lake	5,000
Orr Lake	10,000	Deer River	1,000
Victoria:		Kamaniskeg Lake	10,000
Mud Lake, also called Dal-		Moirs River	10,000
rymple Lake	10,000	Huron:	
		Bluevale River	10,000
FINGERLINGS		Lanark:	
Lincoln:		Bennett's Lake	5,000
Twenty Mile Creek, also		Black Lake	5,000
called Jordan Pond	1,000	Christie Lake	5,000
Norfolk:		Mississippi Lake	10,000
Little Lake	1,153	Otty Lake	10,000
		Pike Lake	5,000
ADULTS		Silver Lake	5,000
Carleton:		Leeds:	
McKay Creek, also called		Cranberry Lake	5,000
Hemlock Creek	6	Gananoque Lake	10,000
Kent:		Grippen Lake	5,000
Rondeau Bay	15	Rideau Lake (Wolfe Lake)	25,000
Waterloo:		Sand Lake	5,000
Grand River	6	Troy Lake	5,000
SMALL-MOUTHED BLACK BASS		Lincoln:	
FRY		Twelve Mile Creek	10,000
Bruce:		Muskoka:	
Boat Lake	5,000	Bass Lake	5,000
Cameron Lake	2,500	Big Rat Lake	5,000
		Black Creek	5,000
		Bull Head Lake	5,000
		Deer Lake (Stephenson) ..	5,000
		Koshee Lake	5,000
		Leonard Lake	5,000
		Muskoka Lake	20,000
		Poverty Lake	5,000
		Riley's Lake	5,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS, 1935-36—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Muskoka—Cont.

Rosseau Lake	20,000
Six Mile Lake	10,000
Sucker Creek	5,000
Three Mile Lake	5,000
Wood Lake	5,000

Norfolk:

Waterford Pond	5,000
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Northumberland:

Brighton Bay	5,000
Crow River	5,000

Ontario:

Lake St. John	5,000
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Parry Sound:

Ahmie Lake	10,000
Bear Lake	5,000
Beaver Lake	5,000
Blue Lake	5,000
Commanda Lake	5,000
Crane Lake	5,000
Deer Lake (McKenzie) also called Wah-Wash-Kesh ...	10,000
Deer Lake (Lount) also called Ferry Lake	10,000
Doe Lake	10,000
Jack's Lake	5,000
Lake of Many Islands ...	5,000
Limestone Lake	5,000
Little Clam Lake	10,000
Lynch Lake	5,000
Magnetawan River	10,000
Manitowaba River	5,000
Mill Lake	5,000
Restoule Lake	10,000
Rausch Lake, also called Long Lake	5,000
Stormy Lake	5,000
Sucker Lake	5,000
Trout Lake (McDougall) .	5,000
Trout Lake (Humphrey) .	10,000
Whitestone Lake	5,000
Wilson Lake	5,000
Wolf River	10,000

Prince Edward:

Consecon Lake	5,000
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Renfrew:

Corry Lake, also called Chalk Lake	5,000
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Simcoe:

Lake Couchiching	15,000
Severn River	20,000

Victoria:

Mud Lake, also called Dalrymple Lake	10,000
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Waterloo:

Grand River	15,000
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New Dundee Creek, also called Alden Creek
Speed River

5,000
10,000

FINGERLINGS

Addington:

Beaver Lake	800
White Lake	800

Algoma:

Basswood Lake, also called Waquekobing Lake	2,000
Clear Lake, also called Wakomata Lake	2,000
Gawas Bay (North Channel)	2,000
Pipe Lake	1,000
Stuart Lake	1,000
Lake George, St. Joseph's Channel, and Pine Island .	6,000
(St. Mary's River)	

Brant:

Big Creek	7,000
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Bruce:

Chesley Lake	5,000
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Durham:

Rice Lake	2,000
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Elgin:

Lake Pinafore	765
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Frontenac:

Black Lake	500
Elbow Lake	500
Gull Lake	5,000
Long Lake (Portland) ...	500
Long Lake (Clarendon) also called Kash-wak-a-mak	500
Potspoon Lake	500
Shawenigog Lake, also called McClintock Lake	500
White Lake	1,000

Glengarry:

St. Lawrence River	3,000
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Haliburton:

Miserable Lake	1,000
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Hastings:

Baptiste Lake	1,000
Gunter Lake	500
Little Salmon Lake	500
Loon Lake (Bangor Twp.)	500
Moir Lake, also called Hog Lake	1,000
Otter Lake	500
Tongamong Lake	500
Trout Lake	500
Weslemkoon Lake	500
York River	500

Kent:

Rondeau Bay	15,000
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Lanark:

Round Lake	1,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—ContinuedSMALL-MOUTHED BLACK BASS
—Continued

Leeds:	
Charleston Lake	1,500
Cranberry Lake	1,000
Grippen Lake	1,000
Otter Lake	1,000
South Lake	1,000
Whitefish Lake	1,000
Manitoulin:	
Tobacco Lake	2,500
Middlesex:	
Pond Mills	1,000
Thames River	12,200
Muskoka:	
Duck Lake	1,000
Joseph Lake	2,000
Long Lake	1,000
Pine Lake	10,000
Lake Rosseau	2,000
Sparrow Lake	10,000
Northumberland:	
Crow Bay	500
Crow River	1,500
Trent River	1,000
Parry Sound:	
Deer Lake, also called	
Wah-Wash-Kesh Lake..	1,000
Peterborough:	
Belmont Lake	1,000
Deer Lake (Belmont) ..	1,000
Deer Lake (Cavendish) ..	1,000
Jack's Lake, also called	
White's Lake	1,000
Lovesick Lake	1,000
Oak Lake	1,000
Round Lake	1,000
Renfrew:	
Andrews Lake, also called	
Rosebank Lake	500
Gould Lake	500
Hurd's Lake also called	
Hond's Lake	500
Maves Lake	500
Simcoe:	
Little Lake (Vespra)	1,000
Victoria:	
Balsam Lake	2,000
Cameron Lake	1,000
Pigeon Lake	1,000
Round Lake	1,000
Sturgeon Lake	2,000
Waterloo:	
Conestoga Stream	1,000
River Nith	1,000
Grand River	15,500
Wellington:	
Puslinch Lake	1,000

YEARLINGS

Manitoulin:	
Tobacco Lake	56
Kagawong Lake	800
Middlesex:	
Thames River	2
Waterloo:	
Grand River	8

ADULTS

Carleton:	
McKay Creek, also called	
Hemlock Creek	6
Kent:	
Rondeau Bay	161
Middlesex:	
Thames River	44
Rainy River:	
Clearwater Lake, also called	
Burdette Lake	12
Jackfish Lake	7
Waterloo:	
Grand River	39
Sudbury:	
Miscellaneous planting—Fingerlings,	
Adults, and Yearlings	
Windy Lake	300
Lake Penage	2,000

MASKINONGE

Durham:	
Rice Lake	50,000
Hastings:	
Crow Lake	50,000
Northumberland:	
Crow Bay	20,000
Trent River	45,000
Peterborough:	
Chemong Lake	25,000
Clear Lake	50,000
Round Lake	20,000
Victoria:	
Balsam Lake	50,000
Stump Lake (Pigeon	
River)	100,000
Sturgeon Lake	50,000

PICKEREL

Addington:	
Beaver Lake	150,000
White Lake	250,000
Algoma:	
Basswood Lake, also called	
Waquikobing Lake	125,000
Crane Lake	50,000
Echo Lake	1,754,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued**Pickereel—Continued****Algoma—Cont.**

Gordon Lake	125,000
Keichel Lake	300,000
Little Clear Lake	125,000
Mississauga River	1,000,000
Rock Lake	125,000
St. Mary's River	2,500,000

Bruce:

Boat Lake	250,000
Lake Chesley	100,000
Lake Isaac	250,000

Carleton:

Ottawa River	900,000
Rideau River	750,000

Durham:

Rice Lake	2,000,000
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Frontenac:

Bass Lake, also called Victoria Lake	200,000
Bull Lake	150,000
Crow Lake	100,000
Gull Lake	500,000
Loughborough Lake	500,000
Mississagagon Lake	250,000
Sharbot Lake	200,000
Seeley's Bay	500,000
Thirteen Island Lake	200,000

Grey:

Saugeen River	250,000
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Haliburton:

Long Lake (Lutterworth)..	50,000
Paudash Lake	500,000

Hastings:

Bear Lake (Limerick) ...	100,000
Deer River	100,000
Hog Lake	250,000
Lakeview Lake	150,000
Latta's Creek, also called Moira, or Sayer's River.	150,000
Malord's Lake	100,000
Papineau Creek	250,000
Salmon Trout Lake, also called Bartlett's Lake..	150,000
Tongamong Lake	250,000

Kenora:

Big Vermilion Lake	5,000,000
Eagle Lake	2,500,000
Gun Lake	500,000
Marchington Lake	2,000,000
Stanzihikimi Lake	2,000,000
Lake of the Woods.....	26,000,000

Lanark:

Beaver Lake	200,000
Bennett's Lake	300,000
Black Lake	100,000
Christie Lake	250,000
Dalhousie Lake	200,000
Pipe Lake	150,000
White Lake also called Wabalak Lake	500,000

Leeds:

Bass Lake	100,000
Green's Lake, also called Red Horse Lake	100,000
Rideau Lake	1,500,000
Sand Lake	100,000

Lincoln:

Twelve Mile Creek	500,000
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Manitoulin:

Mudge Bay	500,000
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Muskoka:

Allan's Lake	50,000
Axe Lake	200,000
Black Lake	200,000
Brandy Creek, also called Sucker Creek	50,000
Leonard Lake	100,000
Mootes Lake	50,000
Muskoka Lake	1,000,000
Riley Lake	200,000
Rosseau Lake	1,900,000
Six Mile Lake	500,000
Sparrow Lake	2,000,000 eggs

Nipissing:

Jumping Caribou Lake...	150,000
Lake Timagami	2,000,000
Morton Lake	250,000
Nosbonsing Lake	500,000
Red Cedar Lake	250,000
Talon Lake	250,000
Tilden Lake	100,000
Tomiko Lake	300,000
Trout Lake (Widdifield)..	250,000
Turtle Lake	200,000
Wickstead Lake	250,000
Wilson Lake	100,000

Northumberland:

Crow Bay	200,000
Crow River	500,000
Trent River	1,200,000

Ontario:

Lake St. John	200,000
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Parry Sound:

Crawford, or Otter Lake..	50,000
Ahmlic Lake	1,000,000
Bain Lake	50,000
Bass Lake (Patterson) ..	200,000
Boundry Lake	200,000
Chain of Lakes (Monteith)	150,000
Commanda Lake	200,000
Crane Lake	200,000
Deer Lake, also called Wah-Wash-Kesh (McKenzie)	300,000
Deer Lake, also called Ferry Lake (Ferry Twp.)	250,000
Doe Lake	300,000
Dogfish Lake	250,000
Georgian Bay	2,000,000
Jack's Lake, also called Murphy's Lake, and Ratz Bay	50,000
Isabella Lake	100,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued

PICKEREL—Continued

Parry Sound—Cont.

Kagiwong, also called Pick- erel River or Dollar Lake	100,000
Lake of Many Islands ...	250,000
Oastler's Lake	100,000
Otter Lake (Foley)	250,000
Portage Lake	250,000
Rainy Lake	50,000
Restoule Lake	200,000
Sequin River	200,000
Shawanaga Lake	250,000
Stormy Lake	100,000
Whitestone Lake	200,000
Wilson Lake	50,000
Wolf River	250,000

Peterborough:

Belmont Lake	500,000
Chemong Lake	500,000
Deer Lake (Belmont) ...	100,000
North River	450,000
Oak Lake	200,000
Otonabee River, and Little Lake	300,000
Round Lake	200,000
Seeright's Bay	50,000
Indian River	250,000

Prince Edward:

Bay of Quinte	2,250,000
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Rainy River:

Beaverhouse Lake	100,000
Clearwater, or Burdette Lake	2,000,000
Off Lake	1,000,000
Quill, or Feather Lake ...	2,000,000
Rainy Lake	82,900,000
Red Gut Bay	2,000,000
Windigoostigwan Lake, or Windigo Lake	500,000

Renfrew:

Madawaska River	300,000
Norway Lake	150,000
Nakine Lake	200,000
White Lake	200,000
York Branch River	250,000

Simcoe:

Cook's Lake, or Farlan's Lake	250,000
Couchiching Lake	3,000,000
Little Lake (Vespra) ...	250,000
Matchedash Bay	2,300,000
Nottawasaga Bay	750,000
Severn River (Gloucester Pool)	2,000,000

Sudbury:

Charles Billies Lake	100,000
Long Lake, or Walker Lake	500,000
Lost Lake, or Ramsay Lake	500,000
French River	1,000,000
Lake Penage	2,000,000
Murray Lake	150,000
Vevenue, or Ratter Lake	250,000
Wahnapiatae Lake	500,000
Washigama Lake	200,000

Thunder Bay:

Lake Shebandowan	2,000,000
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Temiskaming:

("C" indicates Cochrane District)

C. Barbers Bay	250,000
Bay Lake, Montreal River	200,000
C. Big Water Lake	200,000
C. Reid Lake	50,000
Sesekinika Lake	500,000
Lake Temiskaming	500,000
C. Wilson Lake	50,000

Victoria:

Little Mud Turtle Lake ..	100,000
Mud Lake, or Dalrymple Lake	250,000
Round Lake	50,000
Young's Lake	50,000

Waterloo:

Grand River	2,000,000
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Welland:

Patterson Lake	500,000
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Great Lakes:

Lake Huron	16,700,000
North Channel	5,000,000
Lake Superior	14,425,000

BROWN TROUT

FINGERLINGS

Bruce:

Formosa Creek (Culross) ..	3,000
Formosa Pond (Carrick) ..	2,000

Durham:

Baldwin's, or Wilmott's Creek	5,000
Baxter's Creek	5,000
Cavan Creek	5,000
Orono Creek, and Mill Pond	3,000

Grey:

Saugeen River	20,000
Snipe Creek	5,000
Sydenham River	5,000

Haldimand:

Grand River	3,000
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Hastings:

Squire's Pond	5,000
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Muskoka:

Sage Creek	5,000
Sharp's Creek	5,000

Norfolk:

Brown Creek:	3,000
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Northumberland:

Brown's Pond	2,000
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Oxford:

Whiteman's Creek	10,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued

BROWN TROUT—Continued

Peterborough:	
Dickson's Creek	3,000
Jack's Creek	5,000
Temiskaming:	
Larder Lake	10,000
Waterloo:	
Grand River	5,000

ADULTS

Carleton:	
Rideau River (from Ottawa Exhibition)	6

YEARLINGS

Brant:	
Branch Creek	1,000
Bruce:	
Vogt's, or Adamsville Creek	1,000
Elgin:	
Little Otter River	1,000
Grey:	
Beaver River	1,000
Big Head River	1,000
Sydenham River	1,000
Halton:	
Sixteen Mile Creek	500
Hastings:	
Rawdon's Creek	1,000
Waterloo:	
Bridgeport Mill Dam	300
Fisher Mill Creek	700
Experimental purposes ...	100
Wellington:	
River Speed	500
York:	
Humber River	550

LAKE TROUT**FRY**

Addington:	
Black Lake	10,000
White Lake	25,000
Frontenac:	
Buck Lake	10,000
Dog Lake	25,000
Gould Lake	15,000
Grindstone Lake	5,000
Loughborough Lake	30,000
Mississagagon Lake	25,000
Schooner Lake	25,000
Sharbot Lake	20,000
Trout Lake, or Palmerston Lake	25,000

Haliburton:

Boskung Lake	20,000
Davis Lake	5,000
Devil's Lake	15,000
Drag Lake	20,000
Gull Lake	30,000
Paudash Lake	15,000
Pine Lake	10,000
Twelve Mile Lake	10,000
Sheldon's Lake	5,000

Hastings:

Baptiste Lake	50,000
Big Salmon Lake	5,000
Eagle Lake	15,000
Jamieson Lake	10,000
John's Lake	10,000
Hardwood Lake	10,000
Papineau Lake	10,000
Salmon Lake	5,000
St. Peter Lake	15,000
Sylva Lake	5,000
Tongamong Lake	15,000
Weslemkoon Lake	30,000

Leeds:

Red Horse Lake	25,000
Rideau Lake	150,000

Muskoka:

Mary Lake	25,000
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Nipissing:

Morton Lake	50,000
Red Cedar Lake	50,000
Sturgeon Lake	25,000
Trout Lake	50,000
Turtle Lake	15,000

Parry Sound:

Sollman Lake	25,000
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Peterborough:

Belmont Lake	15,000
Loon Lake	15,000
Trout Lake	10,000

Renfrew:

Lake Clear	25,000
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Thunder Bay:

Lake Nipigon	50,000
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York:

Lake Simcoe	100,000
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Great Lakes:

Lake Ontario	767,000
Lake Huron	600,000
North Channel	1,000,000
Lake Superior	4,251,034

FINGERLINGS**Algoma:**

Achigan Lake	30,000
Basswood, or Waquikobing Lake	35,000
Chub Lake	15,000
Clear, or Wakomata Lake.	50,000
Cummings Lake	15,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS, 1935-36—Continued

LAKE TROUT—Continued

Algoma—Cont.

Deep Lake	10,000
Diamond Lake	5,000
Hawk Lake	10,000
Hobon Lake	15,000
Jobammeghia, or Boundry Lake	25,000
Lake of the Mountains ..	20,000
Long Bear Lake	30,000
Loon, or Northland Lake (Deroche)	10,000
Magog, or Granny Lake ..	25,000
Patton Lake	15,000
Pickerel Lake	10,000
Sand, Lake	30,000
Trout Lake (Aweres) ..	10,000
Trout Lake (24-R-12) ..	25,000
Upper Island Lake	5,000

Bruce:

Gillies Lake	50,000
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Haliburton:

Bear Lake (Livingstone) ..	10,000
Clearwater, or Hardwood Lake	5,000
Crooked Lake (Guilford) ..	15,000
East Lake	5,000
Raven Lake	10,000
Spruce Lake	5,000

Kenora:

Big Vermilion Lake	50,000
Dogtooth Lake	50,000
Eagle Lake	50,000
Gun Lake	25,000
Lake of the Woods	895,000
Minnitaki Lake	50,000
Red Deer Lake	25,000
Silver Lake	50,000
Trout Lake (Pellatt) ..	15,000
Vermilion (Little) Lake ..	25,000

Lanark:

Pike Lake	15,000
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Leeds:

Charleston Lake	50,000
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Muskoka:

Bruce's Lake	10,000
Clear Lake (Ridout)	15,000
Haley's Lake	10,000
Lake Rosseau	50,000
Lake of Bays	25,000
Muskoka Lake	10,000
Skeleton Lake	25,000
St. Mary's Lake, or Paint Lake	5,000

Nipissing:

Bear Lake	25,000
Camp Lake	10,000
Lake Timagami	200,000
Oxbow, or Fatty's Lake ..	15,000
Tasso Lake	15,000
Trout Lake (Widdifield) ..	2,400

Parry Sound:

Bay Lake	10,000
Clear Lake (Perry)	15,000
Deer Lake	10,000
Georgian Bay	4,520,000
Horseshoe Lake, or Pak-She-Gong-Ga	10,000
Maple Lake	15,000
Otter Lake	15,000
Round Lake	10,000
Salmon Lake	25,000
Sand Lake	15,000
Sucker Lake	10,000
Spring Lake	15,000
Three Legged Lake	25,000

Rainy River:

Steepprock Lake	50,000
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Sudbury:

Ella Lake	15,000
Loon Lake, or Borden Lake	15,000
Lake Penage	40,000
Ramsay Lake, or Lost Lake	50,000
Windy Lake	25,000

Thunder Bay:

Oliver Lake	10,000
White Lake and River...	25,000

Temiskaming:

Crystal Lake	5,000
Larder Lake	1,600
Nellie Lake	10,000
Perry Lake	10,000
Rib Lake	10,000
Sesekinika Lake	15,000
Lake Temiskaming	25,000
Watabeag Lake	20,000

Great Lakes:

Lake Superior	680,000
North Channel	100,000
Lake Huron	6,555,000

LANDLOCKED SALMON

YEARLINGS

Bruce:

Gillies Lake	1,500
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Grey:

Bass Lake	1,000
Mary Lake	310

Muskoka:

Skeleton Lake	1,500
Fairy Lake	750
Muskoka River	1,180
Peninsula Lake	750
Pine Lake	1,250

Nipissing:

Trout Lake	1,700
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Sudbury:

Wahnapiatae Lake	1,700
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York:

Lake Simcoe	2,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS, 1935-36—Continued

KAMLOOPS TROUT		SPECKLED TROUT	
FINGERLINGS		FRY	
Algoma:		Haliburton:	
Constance Lake	42,464	Fletcher Lake	100,000
Trout Lake (Aweres) ...	43,000	Hollow River	50,000
		Slipper Lake	20,000
		Wolf Lake	15,000
YEARLINGS			
Muskoka:		Hastings:	
Echo Lake	7,796	Baptiste Lake	100,000
		Bear Creek (Dungannon) ..	5,000
Nipissing:		Diamond Lake	15,000
Bloom Lake	3,000	Egan Creek	10,000
		Lake St. Peter	100,000
RAINBOW TROUT			
Bruce:		Muskoka:	
Teeswater River—Little		Bella Lake	80,000
Dam	5,000	Dotty's Lake	50,000
		Echo Lake	20,000
Dufferin:		Lake of Bays	450,000
Pine River	4,000	Loon Lake Creek	10,000
		Mary Lake	50,000
Elgin:		Muskoka River	150,000
Howes Pond	575	Rebecca Creek	75,000
St. Thomas City Reservoir ..	20,000	Rill Lake	7,000
		Shoe Lake (Ridout Tp.) ..	10,000
		Skeleton Lake	50,000
		Tooke's Lake	25,000
		St. Mary's Lake	50,000
Grey:		Nipissing:	
Leake's Pond	1,500	Oxbow Lake	25,000
Minke's Lake	5,000		
Sheppard's Lake	8,000	Parry Sound:	
Stewart's Lake	5,000	Barrett's Creek	15,000
Sydenham River	5,000	Cottingham Creek	10,000
Townsend's Lake	1,500	Deer Lake (Perry Tp.) ...	10,000
		James Creek	10,000
Leeds:		Lynx Lake	15,000
South Lake	3,000	Poole Lake	15,000
		Magnetawan River	50,000
Norfolk:		Ragged Creek	15,000
Black Creek	12,500	Rat Lake	5,000
		Scharnhorn Lake	25,000
Simcoe:		Peel:	
Bear Creek	4,000	Humber River	6,000
Brough's Creek	5,000	(Sale)	2,000
Coldwater River	11,500		
Sturgeon River	6,500		
YEARLINGS AND ADULTS		FINGERLINGS	
York:		Algoma:	
Doan's Pond	5,000	Achigan Lake	10,000
Humber River	13,000	Agawa Lake	50,000
Lake Simcoe	13,000	Alva Lake	7,000
Private waters (Sales) ..	5,000	Anjigami Creek	10,000
		Batchewana River	15,000
		Bellevue Creek	5,000
		Boundry Lake	5,000
		Boyles Creek	3,000
		Bridgeland River	29,500
Carleton:		Caldwell's Lake	5,000
Rideau River	6	Camp 8 Creek	10,000
		Canoe Lake	10,000
Thunder Bay:		Centre Lake	5,000
Mirror Lake	3	Chub Lake	15,000
		Chippewa River	45,000
York:		Driving, or Victoria Creek ..	15,000
Humber River	5	Foot Lake	5,000
Private waters (Sales) ...	300		

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued

SPECKLED TROUT—Continued

Algoma—Cont.		Mullins Pond	3,000
Garden River	10,000	Spring Creek (Carrick Tp.)	2,000
Gavar Lake	7,500	Spring Creek (Amabel Tp.)	15,000
Goulais River	35,000	Sparrows Creek	2,000
Gravel River	8,730	Dufferin:	
Harmony River	10,000	Beaver Meadow Stream...	5,000
Havilah Lake	5,000	Butler's Creek	10,000
Hawk Lake	10,000	Caldwell Creek	2,000
Hoath Lake	5,000	Pine River	15,000
Hobon Lake	15,000	Durham:	
Hubert Lake	16,000	Allen's Creek	1,000
Island Lake	10,000	Ard's Creek	500
Jackfish Lake	5,000	Arnott's Creek	10,000
Jobammeghia Lake	15,000	Best's Stream	5,000
Kennedy Lake	5,000	Brinscombe Creek	1,000
Lavar Lake	1,000	Butter's Creek	500
Loon Lake (24-R-13)	10,000	Cavan Creek	15,000
Loon Lake (Kirkwood) ..	10,000	DeLong Creek	5,000
Loon Lake (Deroches) ..	10,000	Jamieson Pond	3,000
Loon Lake Creek	5,000	Harris Creek	2,000
Loonskin Lake	15,000	Haydon Stream	5,000
Mashagami Lake	20,000	Ganaraska River	5,000
Michipicoten River	15,000	Gardner's Pond	7,000
Mile 58 Lake	5,000	Mercer's Pond	3,200
Mongoose Lake (25-R-14) ..	10,000	McKindley's Creek	5,000
Moose Lake (25-R-13)...	10,000	McLaughlin Creek	4,000
Mountain Lake	5,000	Nicholson Creek	1,000
McCormack Lake	5,000	Orono Creek	500
McIntyre Lake	1,000	Rutherford's Creek	1,000
McVeigh Creek	20,000	Smith's Creek	3,000
One Lake	5,000	Snowden's Creek	2,500
Peak Lake	5,000	Elgin:	
Pine Lake (24-R-13)	7,000	Ball Creek	20,000
Pine, or Prugh Lake		Goodwillie Creek	5,000
(24-R-12)	7,000	Orange Hall Creek	5,000
Pinkney Lake	5,000	Frontenac:	
Reserve Lake	10,000	Trout Lake	50,000
Sand Lake Creek	15,000	White Lake (Bedford)	
Sand River	15,000	Creek	2,500
Scarbo Lake	5,000	Grey:	
Snowshoe Creek	7,000	Bell's Creek	5,000
Speckled Trout Lake	10,000	Bell's Lake	5,000
Speckled Trout Pond	2,500	Big Head River	50,000
Spruce Lake	10,000	Camps Creek	5,000
St. Mary's River	25,000	English Lake	15,000
Tamarack, or Quintnel		Gardner Lake	15,000
Lake	5,000	Glen Creek	20,000
Tawabinasay Lake	10,000	Hydro Waters (Eugenia	
Triple Lake	5,000	Pond)	30,000
Trout Lake (Aweres)	15,000	Maxwell Creek	10,000
Trout Lake (24-R-12)	2,000	Miller Creek	5,000
Upper and Lower Twin		Morton's Creek	5,000
Lakes	10,000	Pepper's Creek	6,000
Unnamed stream (Shields		Priddle's Spring Creek ..	10,000
Tp.)	7,000	Rob Roy Creek	10,000
Wa-Wa Lake	10,000	Rocky Saugeen River	10,000
Walker Lake	5,000	Saugeen River	55,000
Wallace Lake	5,000	Sydenham River	35,000
Waterhole Lake	10,000	Trout Creek (Sydenham) ..	25,000
Wartz Lake	20,000	Williams Lake	10,000
White River	50,000	Haliburton:	
Winchell Lake	1,000	Bear Creek (Glamorgan) ..	5,000
Wyel Lake	1,000	Blue Lake	5,000
Brant:		Hollow Lake	100,000
Moody and Lyons Creeks.	5,000	Kimball Lake	30,000
Bruce:			
Judges Creek	20,000		

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued

SPECKLED TROUT—Continued

Haliburton—Cont.	
McCue Creek	10,000
McFadden's Lake	15,000
Otter Lake	25,000
Percy Lake	25,000
Ross Lake	5,000
Round Lake	30,000
Spring Lake (Livingstone)	10,000
Hastings:	
Baptiste Lake	75,000
Brett's Lake	5,000
Cedar Creek	15,000
Crooked Lake	50,000
Diamond Lake	15,000
Echo Lake	75,000
Egan Creek	20,000
Fraser Creek	15,000
Geen's Creek	10,000
Green's Lake	20,000
Hick's Lake	25,000
Little Papineau Creek	10,000
Long Lake	25,000
Squire's Creek	7,000
St. Peter Lake	75,000
Trout Creek (Rawdon Tp.)	5,000
Huron:	
Porter's Creek	7,000
Stoney, or Coates' Creek	2,000
Kenora:	
Harris River	5,000
Lennox-Addington:	
Beaver Creek	15,000
Manitoulin:	
Blue Jay River	6,000
Manitou River	6,000
Mindemoya River	25,000
Middlesex:	
Centre Road Creek	2,500
Muskoka:	
Beaver Creek	2,500
Big East River	7,500
Buck Lake	15,000
Clear Lake	95,000
Crotch Lake	20,000
Eighteen Mile Lake	30,000
Fairy Lake	50,000
Grindstone Lake	10,000
Martin Lake	7,000
Muskoka River	15,000
Lake Vernon	100,000
Little East River	12,000
Peninsula Lake	75,000
Poverty Lake	2,500
Red Chalk Lake	10,000
Split Rock Lake	2,500
Spring Creek (Watt Tp.)	1,000
Wolf Lake	5,000
Miscellaneous streams running into Lake of Bays, Mary Lake, Fairy Lake, Peninsula Lake, and Vernon Lake	50,000

Nipissing:

Anderson Lake	5,000
Black Creek	5,000
Chippewa Creek	7,500
Clear Lake	5,000
Dorans Creek	7,500
Duschene Creek	7,500
Four Mile Creek	7,500
George Lake	5,000
Giroux Creek	3,000
Hoover's Lake	7,000
Lake Timagami	30,000
Mosquito Creek	7,500
McCarty Creek	5,000
Nelson Lake	10,000
Noble Creek	10,000
North River	15,000
Oxbow Lake	25,000
Poor Man's Creek	5,000
Robert Creek	5,000
Toad Lake	10,000
Tomiko Lake	7,500
Traverse Creek	6,000
White Partridge Creek	9,000

Norfolk:

Clear Creek	2,500
Mather Creek	2,500
Nanticoke Creek	10,000
Venison Creek	20,000

Northumberland:

Baltimore Creek	7,500
Beaman Creek	5,000
Big Creek	1,835
Black's Creek	6,800
Bowen's Pond	5,000
Brighton Mill Creek	4,000
Burnley Stream	17,500
Chidley's Creek	2,500
Dartford Creek	7,500
Duncan Creek	2,500
Heffernan's Creek	2,000
Little Cole's Creek	10,000
Mill Pond	10,000
McComb's Creek	7,500
Piper Creek	2,500
Quinn's Creek	2,500
Robin's Creek	2,500
Salt, or Dawson Creek	15,000
Sandy Flats Creek	15,000
Simpson Creek	5,000
Smithfield Creek	5,000
Taylor Creek	2,500
Trout Creek	10,000
Valleau Creek	2,500
Woodland Creek	5,000

Ontario:

Black Creek	9,000
Chubtown Creek	12,000
Elgin Pond, or lake	6,000
Glenhudson Creek	2,500
McLean's Creek	3,000

Oxford:

McCabe's Creek	500
Sutherland's Pond and creek	2,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued

SPECKLED TROUT—Continued

Parry Sound:		Allen Creek	5,000
Big Clam Lake	15,000	Allen Lake	10,000
Canoe Lake	10,000	Anderson's Creek	2,000
Cashman's Lake	2,500	Anderson Lake	5,000
Comfort Lake	6,000	Bass Lake	5,000
Deer River	25,000	Bender Lake	2,000
Eagle Lake	100,000	Big Duck Creek	3,000
Genesee Creek	15,000	Brule Creek	4,000
Lake Bernard	25,000	Caribou Creek	4,000
		Caribou Island Lake	3,000
Peel:		Charlotte Lake	5,000
Credit River	13,000	Clearwater Lake	3,000
Spring, or Secret Creek..	1,000	Corinne Lake	4,000
Peterborough:		Coldwater River	47,000
Buchanan's Creek	5,000	Cousineau Lake	5,000
North River	25,000	Current River	62,700
Norwood Creek	3,000	Deep Lake	7,000
Ouse River	30,000	Deception Lake	7,000
Otter Creek	5,000	Echo Lake	5,000
Plato Creek	15,000	Fox Lake	5,000
Scott's Creek	5,000	Fraser Creek	114,000
Renfrew:		Grange Lake	4,900
Benoit Lake	3,000	Gravel Lake	6,000
Black Donald Creek	10,000	Ham Lake	3,000
Birchim Lake	7,000	Hilma Lake	5,000
Burns Lake	25,000	Kajander Lake	5,000
Calhane Creek	10,000	Kowkash and Squaw	
Christink Lake	10,000	Rivers	50,000
Dam Lake Creek	15,000	Loon Lake (McTavish) ..	15,000
Dan's Lake	8,000	Loon Creek	1,500
Dodge Lake	3,000	Lofquist Lake	15,000
Dominic Lake	3,000	Little Lake	5,000
German Lake	5,000	Mac's Lake	2,000
Gun Lake	5,000	Mirror Lake	5,000
Highland Creek	15,000	Moose Lake, near	
Johnson's Lake	6,000	Schreiber	3,000
Little Madawaska River..	9,000	Moose Lake, near Pearl..	1,500
Lake Clear	6,000	McIntyre Creek	20,000
Lower and Upper Long		McIntyre River	22,000
Lake	15,000	McKenzie River	16,000
Madawaska River	20,000	McVicar's Creek	10,000
Mason Lake	5,000	McVicar's Lake	5,000
McMaster Lake	6,000	Neebing River	10,000
Nadeau Creek	10,000	Nipigon Lake	100,000
Paddy's Lake	6,000	Nipigon River	164,000
Petawawa River	12,000	Ninety Minute Lake	5,000
Rock Lake	4,000	Pitch Creek	6,000
Trout Lake (Head)	5,000	Pearl River	52,000
Young's Lake	5,000	Servais Lake	2,000
Simcoe:		Silver Lake	5,000
Creek in Tecumseh	5,000	Silver Islet Creek	10,000
Silver Creek	20,000	Small McKenzie Lake	5,000
Sudbury:		Strawberry Creek	9,500
Clear Lake	31,000	Sunset Lake	7,000
Garson Creek	12,000	Trout Lake (Gorham) ..	5,000
Post Creek	10,000	Twin Creek	2,000
Poulin Creek	15,000	Twin Lake	1,000
Sandcherry Creek	12,000	Webb Lake	10,000
Trout Lake (Roberts Tp.)	20,000	White River	10,000
Trout Lake #6	5,000	Wigan Lake	3,000
Veuve River	15,000	Wideman Lake	7,000
Thunder Bay:		Whitewood Creek	6,000
Ada Lake	10,000	Wolf River	3,000
Ann Lake	10,000		
		Temiskaming:	
		(Prefix "C" indicates Cochrane	
		District)	
		Blanche River	5,000
		C. Charlebois Lake	5,000
		C. Croft's Creek	5,000

**SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued**

SPECKLED TROUT—Continued

Temiskaming—Cont.	
Crooked Creek	5,000
C. Dandurant Creek	5,000
Dickson Creek	2,500
C. Dome Creek	2,500
C. Fuller's Creek	7,500
Gleason Creek	7,500
C. Grassy River	7,500
Halfway Lake	5,000
C. Hooker Creek	5,000
Johnston Lake	5,000
Latour Creek	11,500
C. Legare Creek	5,000
C. Metagami River	7,500
Munroe Lake	5,000
C. McIntyre Pond	2,500
Pike Creek	4,000
C. Red Sucker Creek and River	7,500
C. Rowley Lake	5,000
C. Ramsbottom Creek	5,000
Sesekinika Lake	7,500
C. Shaw's Creek	5,000
Small Spot Creek	7,500
Spring Creek (Firstbrook)	4,500
Watabeag River	15,000
C. Water Hen Creek	5,000

Waterloo:

Elora Creek	10,000
Erbsville Creek	20,000
Grand River	15,000
Jedburgh Dam	3,000
Groves Creek	10,000
Mannheim Creek	20,000
Speed River	10,000
St. Jacob's Creek	3,000

Welland:

Sulphur Springs	5,000
Twelve Mile Creek	7,000

Wellington:

Creek in Luther Twp.	5,000
Ospringle Creek	5,000
Private Waters (Sales)...	3,637
Demonstration	29

ADULTS**Algoma:**

St. Mary's River	584
Island Lake (Aweres Tp.)	764

Lanark:

Paul's Creek	12
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Norfolk:

Crane Creek	45
Gravel Pit Pond	295

Northumberland:

Marsh Creek (Yearlings and Adults)	311
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Thunder Bay:

Mirror Lake	2,675
Private waters (Sales and demonstration)	734

YEARLINGS**Algoma:**

Achigan Creek	1,000
Bridgland River	1,000
Chub Lake	1,000
Deer Lake	1,000
Garden River	1,000
Gravel River	1,000
Harmony River	1,000
Heyden Lake	1,000
Kaskowan River	1,000
Lower Island Lake	500
McLeod's Creek	1,000
Pancake River	1,000
Patton River	1,000
Skookum Lake	1,000
Trout Lake (Aweres) ...	1,000
Upper Island Lake (Aweres)	500
Upper Island Lake (176) ..	1,000

Grey:

Bell's Creek	1,000
Beaver River	1,000

Norfolk:

Crane Creek	155
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Ontario:

Glenhudson Creek	485
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Peel:

Humber River	8
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Thunder Bay:

Cedar Creek	1,000
Current River	1,000
Deception Lake	1,000
Ghost Lake	250
Golden Gate Lake	300
Loon Lake (McTavish) ..	1,000
Lost Lake	1,000
Mirror Lake	6,011
Mosquito Creek	1,000
McIntyre River	1,000
McVicars Creek	2,000
Neebing River	1,000

Waterloo:

Private waters (Sales and demonstration)	212
---	-----

WHITEFISH**Kenora:**

Eagle Lake	1,000,000
Lake of the Woods	8,500,000

Manitoulin:

Bay Flnn (McGregor Bay) ..	2,000,000
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Parry Sound:

Georgian Bay	82,040,000
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Prince Edward:

Bay of Quinte	92,000,000
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Wentworth:

Lake Ontario	16,180,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL
WATERS, 1935-36—Continued**WHITEFISH—Continued**

Great Lakes:	
Lake Erie	44,942,000
Lake Huron	31,720,000
North Channel	4,540,000
Lake Superior	13,560,000
	<hr/>
	296,482,000

HERRING

Frontenac:	
White Lake (Olden)	1,000,000
Hastings:	
Baptiste Lake	500,000
Lake St. Peter	1,000,000
Leeds:	
Charleston Lake	1,000,000
Rideau Lake	3,000,000

Peterboro:

Loon Lake (Chandos) ... 500,000

Prince Edward:

Bay of Quinte36,760,000

GOLDEN SHINERS

Frontenac:

White Lake (Olden) 500

PERCH

Great Lakes:

Lake Erie53,031,400

APPENDIX No. 2

ONTARIO DEPARTMENT OF GAME AND FISHERIES
DISTRIBUTION OF FISH ACCORDING TO SPECIES—1933 TO 1935, INCLUSIVE.

	1933	1934	1935-36
Large-mouthed			
Black Bass—Fry	856	35,250	130,000
Fingerlings		4,250	2,153
Yearlings & Adults..		197	27
Small-mouthed			
Black Bass—Fry	545,000	365,500	696,000
Fingerlings	25,750	35,750	153,065
Yearlings & Adults..	3,471	420	3,435
Maskinonge—	Fry	909,500	460,000
Perch—	Fry	95,000,000	53,031,400
Pickereel—	Eyed Eggs	5,000,000	2,000,000
	Fry	20,500,000	229,629,000
Brown Trout—	Fingerlings	483,016	138,000
	Yearlings	674	14,500
	Adults		689
Lake Trout—	Eyed Eggs	200,000	402,000
	Fry	1,400,000	1,265,000
	Fingerlings	16,012,700	14,045,450
Land-locked			
Salmon	Yearlings		13,640
(Ouananiche)—			
Rainbow Trout—	Eyed Eggs	1,000	
	Fry	4,480	
	Fingerlings	27,016	312,512
	Yearlings	25,014	134,075
Kamloops Trout—	Fingerlings		85,464
	Yearlings		10,796
Speckled Trout—	Eyed Eggs	506,000	
	Fry	725,000	1,645,000
	Fingerlings	5,950,255	6,257,267
	Yearlings	28,237	34,762
	Adults	1,549	1,652
Whitefish—	Fry	372,111,000	376,777,000
Herring—	Fry	22,805,000	17,512,000
Golden Shiners—		7,000	500
TOTALS—	441,325,524	796,619,193	655,747,231

Note: The 1935-36 total does not include the distribution for the five months period—Nov. 1, 1934, to March 31, 1935.

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters

EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	447	2	22	\$ 7,000	156	\$ 71,450	330	\$ 11,883	\$ 444,025	\$ 58,725
Lake Superior	322	10	379	53,000	52	29,525	62	3,690	832,880	84,075
North Channel	196	8	170	48,000	38	32,555	76	5,604	397,850	52,100
Georgian Bay	482	19	449	142,750	129	109,570	94	6,635	1,096,295	111,839
Lake Huron	375	16	490	121,500	124	81,680	48	3,095	1,023,075	133,385
Lake St. Clair	145	.....	.....	.....	54	18,480	88	3,995	.....	.....
Lake Erie	883	28	878	210,500	212	200,900	182	10,707	1,525,400	176,825
Lake Ontario	674	1	8	6,500	199	85,940	214	6,862	937,700	81,805
Southern Inland Waters	464	.....	.....	.....	16	4,960	169	5,244	.....	.....
Totals	3,988	84	2,396	\$589,250	980	\$630,060	1,263	\$57,715	\$6,257,225	\$698,754

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickereel (Blue)	Pickereel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	572	1,303,630	213,710	885,070	18,358	1,549,426
Lake Superior	1,296,739	377,416	1,518,439	9,669	.....	72,894
North Channel	574	304,084	710,907	88,431	.....	65,627
Georgian Bay	21,168	1,292,228	1,475,312	70,010	.....	83,380
Lake Huron	271,255	340,327	2,069,223	934	1,815	275,352
Lake St. Clair	125	1,605	.....	20,579	525	34,503
Lake Erie	96,162	1,190,121	333	8,175	5,064,296	319,311
Lake Ontario	835,687	657,403	244,862	111,758	38,428	28,526
Southern Inland Waters	6,676	11,621	23,550	21,996	75	2,924
Totals	2,528,958	5,478,435	6,256,336	1,216,622	5,122,997	2,431,943
Values	\$126,447.90	\$602,627.85	\$688,196.96	\$72,997.32	\$256,149.85	\$267,513.73

No. 3

DEPARTMENT, ONTARIO

of Ontario, for the Year Ending December 31st, 1935.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value	
..	.....	.....	42	\$13,060	37	\$1,115	...	.....	1,200	\$ 200	...	.....	150	\$ 31,810	120	\$ 14,670	\$ 209,913
..	.....	.....	34	10,485	..	.....	..	.....	.....	.....	..	.....	36	21,525	46	11,185	213,485
..	.....	.....	110	49,100	..	.....	..	.....	.....	.....	3	22	43	12,305	34	13,875	213,561
5	500	675	86	80,700	39	520	..	.....	29,046	4,635	17	82	60	15,875	61	33,380	506,661
1	80	30	120	84,200	..	.....	..	.....	19,690	2,070	...	.....	68	24,475	29	8,710	459,145
46	9,810	4,927	112	11,635	..	.....	2	2	2,550	170	...	.....	30	9,175	10	1,650	45,034
55	14,600	9,440	590	303,750	14	306	8	40	3,450	74	...	.....	114	138,135	80	51,235	1,101,912
14	2,840	1,245	...	.....	757	15,460	32	229	5,500	218	...	.....	33	8,375	29	5,005	211,639
61	7,290	5,735	...	.....	227	5,038	64	274	9,510	290	190	1,520	37	1,803	7	286	25,150
182	\$35,120	\$22,052	1,094	552,930	1,074	22,439	106	\$ 545	70,946	\$7,657	210	\$1,624	571	\$263,478	416	\$139,996	\$2,986,500

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
58,278	.....	23,218	150,689	41,507	1,227	249,614	1,150	4,496,449	\$436,928.73
71	.....	360	209,040	.....	140	93,226	.....	3,577,994	297,372.06
10,801	.....	5,039	32,884	500	2,346	212,205	28	1,433,426	137,299.38
967	.....	2,634	206,069	4,337	16,849	102,202	50	3,275,206	336,048.31
4,585	.....	178,235	472,322	780	3,788	51,214	388	3,669,718	350,285.05
7,943	.....	38,967	.....	39,537	326,738	226,370	341	697,283	37,000.63
22,433	.....	5,633,452	.....	64,096	618,981	1,411,217	726	14,429,303	794,372.59
4,816	60,937	143,128	.....	185,666	200,864	272,637	11	2,784,723	199,233.22
576	14,010	14,680	.....	166,306	309,573	279,898	.....	851,885	44,972.93
110,470	74,947	6,039,713	1,071,004	502,779	1,480,506	2,898,583	2,694	35,215,987	
\$44,188.00	\$5,246.29	\$301,985.65	\$64,260.24	\$40,222.32	\$74,025.30	\$86,957.49	\$2,694.00		\$2,633,512.90

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES
OF ONTARIO

Kind	1934	1935	Increase	Decrease
	Pounds	Pounds		
Herring	2,876,121	2,528,958	.....	347,163
Whitefish	4,922,996	5,478,435	555,439	.....
Trout	5,295,174	6,256,336	961,162	.....
Pike	1,095,911	1,216,622	120,711	.....
Pickrel (blue) ...	2,432,093	5,122,997	2,690,904	.....
Pickrel (dore) ...	2,292,094	2,431,943	139,849	.....
Sturgeon	89,884	110,470	20,586	.....
Eels	63,650	74,947	11,297	.....
Perch	6,018,541	6,039,713	21,172	.....
Tullibee	1,105,158	1,071,004	.....	34,154
Catfish	356,665	502,779	146,114	.....
Carp	1,520,848	1,480,506	.....	40,342
Mixed and Coarse .	3,161,229	2,898,583	.....	262,646
Caviare	2,613	2,694	81	.....
	31,232,977	35,215,987	*3,983,010	.....

*Net Increase

APPENDIX No. 6

STATEMENT OF YIELD OF THE FISHERIES OF ONTARIO
1935

KIND	Quantity Pounds	Price per Pound	Estimated Value
Herring	2,528,958	\$.05	\$ 126,447.90
Whitefish	5,478,435	.11	602,627.85
Trout	6,256,336	.11	688,196.96
Pike	1,216,622	.06	72,997.32
Pickrel (blue)	5,122,997	.05	256,149.85
Pickrel (dore)	2,413,943	.11	267,513.73
Sturgeon	110,470	.40	44,188.00
Eels	74,947	.07	5,246.29
Perch	6,039,713	.05	301,985.65
Tullibee	1,071,004	.06	64,260.24
Catfish	502,779	.08	40,222.32
Carp	1,480,506	.05	74,025.30
Mixed and Coarse	2,898,583	.03	86,957.49
Caviare	2,694	1.00	2,694.00
TOTALS	35,215,987		\$2,633,512.90

APPENDIX No. 7

ESTIMATED VALUE OF ONTARIO FISHERIES FOR A PERIOD OF
TWENTY YEARS 1916-1935 INCLUSIVE

1916	\$ 2,658,992.43	1926	2,643,686.28
1917	2,866,424.00	1927	3,229,143.57
1918	3,175,110.32	1928	3,033,944.42
1919	2,721,440.24	1929	3,054,282.02
1920	2,691,093.74	1930	2,539,904.91
1921	2,656,775.82	1931	2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90

Report

OF THE

Game and Fisheries Department

**FOR THE FIVE MONTHS' PERIOD
ENDING MARCH 31st, 1935.**

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1936



TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 3 7

TO THE HONOURABLE HERBERT ALEXANDER BRUCE,
a Colonel in the Royal Army Medical Corps, F.R.C.S. (Eng.),
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, Report of the Game and Fisheries Department of this Province for the Five Months' Period ended March 31, 1935.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
Minister in Charge,
Department of Game and Fisheries.

Toronto, April 2, 1936.

Report of the Department of Game and Fisheries

- OF ONTARIO -

For the Five Months Period ended
March 31, 1935

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:—I have the honour to place before you this Report of the activities of the Department of Game and Fisheries during the five months' period, commencing November 1st, 1934, and ending March 31st, 1935.

In this report it will, of course, be impracticable to attempt comparative statements for obvious reasons, though statistical tables for the period under review have been prepared and are incorporated herein.

FINANCIAL

The revenue collected by the Department amounted to \$258,348.04, and details of the various sources from which it was derived are as set forth in the subjoined table.

REVENUE FOR THE FIVE MONTH PERIOD ENDING MARCH 31, 1935

GAME—

Royalty	\$ 34,307.15	
Licenses—		
Trapping	\$ 14,070.90	
Non-resident Hunting	30,315.45	
Deer	48,684.40	
Moose	2,194.50	
Gun	39,564.72	
Fur Dealers	14,536.00	
Fur Farmers	5,585.00	
Tanners	156.00	
Cold Storage	64.00	
		155,170.97
		<hr/>
		\$189,478.12

FISHERIES—

Royalty	\$ 1,101.67	
Licenses—		
Fishing	49,243.90	
Angling	7,338.85	
		56,582.75
Sales—spawn taking		61.00
		<hr/>

GENERAL—

Guides' Licenses	370.00	
Fines	3,761.00	
Sales—Confiscated Articles, etc.	3,696.84	
Rent	1,635.50	
Commission	849.87	
Miscellaneous	811.29	
		11,124.50
		\$258,348.04

Quite naturally, the game division brought in by far the greater percentage of this revenue,—fishing, and more particularly angling, by reason of the weather conditions which prevail during this period being very extensively curtailed. It will be of interest to state that this revenue exceeded the amount which it was estimated would be collected.

The exercise of judicious supervision over expenditures was very essential, and while the total in this respect amounted only to \$168,202.67, it is submitted that the various results achieved were creditable, and that the proportionately reduced expenditures did not noticeably interfere with the proper performance of Departmental activities or the provision of necessary services.

GAME

In all, some 18,767 licenses to hunt big game, i.e. deer and moose, were issued under the following divisions:—

Resident licenses to hunt deer	17,584
Resident licenses to hunt moose	399
Non-resident general licenses	397
Non-resident deer licenses	387

In addition we also issued some 317 non-resident licenses to hunt small game animals and birds.

The foregoing figures are an indication that the attractions which the game of this Province affords to the interested sportsman and hunter have a prominent place in our scheme.

A limited distribution of game birds was undertaken during this period,—417 English ring-necked pheasants and 597 Hungarian Partridge according to Departmental records being liberated in different sections of the Province in which suitable environment for these desirable species of game birds was available.

In the matter of Crown Game Preserves, while much preliminary work was done in connection with suitable areas which have been subsequently established as Game Preserves, in only one case, that of the Pond Mills Crown Game Preserve, in the County of Middlesex, was final action provided, and this was the only Crown Game Preserve established during the period under review.

FUR

Active trapping operations were, of course, carried on during this period, though it would include but a very short portion of the open season for the taking of muskrat, one of the principal mainstays of our trapping industry.

The following table will show the number of pelts of various fur-bearing animals taken by trapping and sold to licensed fur buyers, as well as the numbers exported from the Province and dressed within the Province respectively.

	Total Pelts	Pelts Exported	Pelts Tanned
Bear	180	60	105
Beaver	4,356	2,055	33
Fisher	1,451	869	4
Fox (cross)	5,160	3,951	63
Fox (red)	27,501	21,109	1,699
Fox (silver black)	560	381	16
Fox (white)	904	31	1
Fox (not specified)	432	315	6
Lynx	2,180	1,039	9
Marten	943	574	12
Mink	62,162	53,606	1,171
Muskrat	28,340	12,762	15,002
Otter	2,439	1,066	7
Raccoon	11,919	5,764	6,036
Skunk	48,204	23,243	16,124
Weasel	36,904	26,975	433
Wolverine	1	1	—

Revenue from royalties actually received on the pelts exported and tanned, as indicated on the statement of revenue included in this Report amounted to \$34,307.15. This figure does not represent the total amount actually due, for the reason that the large fur companies operating numerous posts in the extreme northern portion of the Province, under an agreement with the Department, balance their fur royalty account at the end of the season, thus certain royalties due on pelts exported and tanned by these companies during the period under review were not received in the Department until after the expiration of this particular period.

Based on average prices which it is believed are reasonably accurate and fair, it has been estimated that for the pelts as shown in column 1 of the above table, trappers would receive from the sale thereof in all a total sum of \$1,024,888.28.

The previous table does not include pelts of silver, black and blue foxes raised on licensed fur farms, which are exempt from the payment of royalty. According to the fur records branch, 15,829 such pelts were exported and 1,587 tanned in the Province, and it has been estimated that in the case of these pelts, the sale of the same secured in excess of \$615,000.00 for the fur farmers responsible for producing the same.

FUR FARMING

Details of live animals stocked on licensed fur farms as at January 1st, 1935, together with similar figures for other years are tabulated below.

ANIMALS STOCKED ON LICENSED FUR FARMS

As at January 1st

	1933	1934	1935
Beaver	44	60	78
Fisher	50	18	19
Fox (cross)	559	443	434
Fox (red)	448	360	286
Fox (silver black)	15,938	16,826	19,314
Fox (blue)	13	10	10
Lynx	2	2	2
Mink	6,170	6,190	8,605
Muskrat	511	499	447
Raccoon	1,202	989	799
Skunk	10	2	—
Bear	16	14	11
Marten	37	22	9
Badger	4	—	—

The number of Fur Farmers' licenses issued during the period was 1081, chiefly comprised of renewals of existing licenses which expired December 31st, 1934.

WOLF BOUNTIES

During the period the Department paid bounty in respect of 1,859 wolves, which is exactly the same number of pelts upon which bounty was paid during the preceding fiscal year. The basic rate of bounty was \$15.00 for an adult wolf and \$5.00 for a pup. In respect to wolves killed in any County, the bounty is paid by the County Treasurer and the Government rebates 40% of the amount to the County.

Details of the expenditures incurred in this connection are as follows:—

	1,787 adult wolves at \$15.00	\$26,805.00
x	66 adult wolves at 6.00	396.00
	4 pup wolves at 5.00	20.00
x	2 pup wolves at 2.00	4.00

1,859	Amount of bounty	\$27,225.00
	Expenses	102.58

Total Expenditures \$27,327.58

x Killed in Counties.

ENFORCEMENT

It was encouraging to observe the improvement which has been evident in this particular division of our work. The services of the regular staff of Overseers maintained by the Department to secure observance of the provisions of the Game and Fisheries Act and Regulations was appreciably augmented by the co-operation which was provided by members of the Ontario Provincial Police Force, and which co-operation is now a permanent feature of this branch of our activity. In addition to this particular improvement, we find an increasing desire on the part of interested sportsmen, both hunters and anglers, to co-operate with us in assisting our regular Overseers to maintain a proper degree of respect for our Game and Fisheries Regulations, even to the extent that in many cases in order to provide themselves with credentials of authority they accept appointments as Deputy Game Wardens, acting without remuneration, rendering co-operation, and providing a measure of service, the value of which, particularly from the moral point of view, it would be exceedingly difficult for us to estimate, and it is fitting and proper at this point in the report that expression should be given to our appreciation of this invaluable assistance and co-operation.

Records show that during the period under review there were 414 cases of infractions in which the offenders were prosecuted in the courts and in which convictions were secured and penalties imposed. In 267 of these cases, the action was originated by Game and Fisheries Overseers; in 104 by members of the Provincial Police force; in 13 by Deputy Game Wardens; and in 30 by co-operative action, Overseers, Deputy Game Wardens and Provincial Police acting in conjunction.

In all there was a total of 455 cases in which seizure of goods and equipment was involved. Here again it is shown that the action was provided by Game and Fisheries Overseers in 313 of these cases; by members of the Provincial Police Force in 52 cases; by Deputy Game Wardens in 58 cases; and in the remaining 32 cases by the co-operative action as previously set forth.

A condensed summary of the articles thus seized shows the following:—

Description of Articles	Number of Seizures
Live Animals	5
Birds, Animals and Game Meat	64
Fire-arms and Ammunition	211
Fish	21
Fishing Equipment (Nets &c.)	69
Miscellaneous Articles	12
Pelts	84
Trapping equipment	61
Water Craft and Motor Cars	11

While the total of this table would indicate 538 seizures, some of the actual 455 seizure cases would be duplicated in these entries; such as one seizure might report fire-arms, as well as birds etc.; another, fish and fishing equipment; while still others would include traps and pelts, and the apparent discrepancy is therefore accounted for by these various duplicate entries from one seizure report.

EXPERIMENTAL FUR FARM

During the period under review, an investigation was carried out regarding the digestibility of various cereal foods for foxes. The first problem investigated was the place of raw and uncooked cereals in the diet. The use of raw cereals finely ground has been widely advocated from time to time as a time and labour-saving method. However, the experimental data secured with test foxes receiving raw ground oatmeal, rice, whole wheat flour and corn meal, revealed quite definitely that they were not properly digested either singly or in combination with one another. The feces showed considerable quantities of undigested starch, thus demonstrating that the fox is unable to reduce starch to an assimilable form in the raw state. On the other hand, when the cereals mentioned above were thoroughly cooked for the period of one hour or so, the foxes were able to digest it very thoroughly. No raw starch could be demonstrated in the feces of these animals.

Further studies were carried out with the round worm and its relation to pathological conditions which are often found in the lungs of young fox pups from one to two weeks of age. From the time the egg is swallowed by the fox it is 51 to 52 days until the female worm reaches naturity and is producing eggs. Once the larvae hatch, they migrate through the body and cause a serious disturbance in the blood cells. This disturbance reaches the peak around the 12th day. It has been definitely established that pups become infected with round larvae previous to birth and that the pregnant female, if infected with larvae, can pass them to the pups by way of the blood stream. An examination of many pups which died in early age show that the small blood vessels of the lungs have been ruptured by the larvae, leading to serious pneumonia complications and often death. It is obvious that fur farmers, (once the cold weather has commenced in the Fall, and which weather conditions prevents parasitic eggs from developing) should make serious efforts to rid all females of adult worms by the use of capsules containing worm-destroying properties. A more detailed account of these experiments has been published in the fur farming press and the results have also been extended to fur farmers by lectures delivered at regional meetings held throughout the Province.

Apart from this work, the customary routine and post mortem examinations of animals sent from ranches for diagnostic purposes were carried out.

FISH CULTURE BRANCH

(See Pages 11, 12 and 13.)

REPORT OF THE BIOLOGICAL AND FISH CULTURE BRANCH

COLLECTION OF SPAWN

Generally speaking, the spawning season of lake trout, whitefish, and herring in the Great Lakes falls to some extent within the period of this report. The spawning season varies according to the species and the geographical, climatic, and limnobiological conditions existing in the various areas.

It would be out of place to go into a discussion of spawning seasons within the compass of this report. It is sufficient to say that during the fall spawntaking crews are organized for the purpose of collecting spawn of the commercial species for our various hatcheries which are located at strategic points along the Great Lakes' chain. In addition to the work of the hatchery crews, the Department has received

excellent co-operation in this respect from the commercial fishermen under the direction and guidance of the Branch. This team play resulted in a satisfactory production of eggs of commercial species and their resultant fry for re-stocking suitable sections of the Great Lakes and commercially fished inland waters. Lake trout are sought after by anglers to a considerable extent in the inland waters of the Province; these waters also receive necessary replenishment from time to time with hatchery stock.

It should be pointed out that an important principle is involved in the establishment of hatcheries on the various Great Lakes and connecting waters, namely, that the eggs collected from such areas are cultured in water of similar composition to that in which the species cultured live and thrive in a natural state, and in which the fry artificially cultured will ultimately be planted. Behind the establishment of district hatcheries there is also the same underlying principle.

The temperature of the water in these commercial fish hatcheries is, generally speaking, the same as the water over the natural spawning grounds where the young fish are developing from the time the eggs are laid on these grounds in the fall, during the winter, and until they hatch in early spring. In the hatchery, however, the eggs are protected from the hazards of a natural environment and are, therefore, carried over a critical period in the life-history of the fish.

Speckled trout spawn was collected from breeders retained in our breeding ponds at Dorion, Sault Ste. Marie, and Normandale. Brown trout eggs were collected from a breeding stock at Mount Pleasant and rainbow trout eggs from a breeding stock at Normandale.

DISTRIBUTION

Very little distribution is done at this period of the year, but during an advanced spring the fry of the whitefish and herring, especially the former, hatch rapidly and must be distributed, since they can be held in the tanks in the hatchery for a limited period only. The distribution made in accordance with directions issued by the Branch was as follows:

Whitefish

Lake of the Woods	4,000,000 fry
Lake Erie	96,620,000 "
Lake Ontario (proper)	10,000,000 "
Bay of Quinte	20,000,000 "
Total	130,620,000 "

Herring

Lake Erie	100,000 fry
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The following distribution of lake trout eyed eggs was carried out on an exchange basis:

Federal Hatchery at Banff, Alta.	100,000 eyed eggs
Federal Hatchery at Middleton, N. S.	102,800 " "
Hatchery at French River, U. S. A.	700,000 " "
Pendleton Oreille Hatchery	100,000 " "
Hatchery at Colville, Washington	200,000 " "
State Fish Hatchery, Canaan, Vermont ...	209,800 " "
Government Hill Hatchery, Augusta, Maine .	102,800 " "
State Fish Hatchery, Colebrook, N. H. ...	308,400 " "
Monmouth Hatchery, Monmouth, Maine ...	102,800 " "
Total	1,926,600 " "

The arrangement with the Canadian Hatcheries was made through the Department of Fisheries, Ottawa, whereby eyed lake trout eggs were exchanged for 100,000 eyed Kamloops trout eggs from Kamloops hatchery, British Columbia. The exchange with the United States hatcheries was on the basis of an equal quantity of eyed speckled trout eggs in return for an equal quantity of lake trout eggs.

In addition to the above, the following distribution of game-fish was made:

Brown Trout	
Experimental purposes	100 yearlings
Rainbow Trout	
Experimental purposes	2,000 eggs
Private waters (sale)	3,000 fingerlings

REMOVAL OF NOXIOUS FISH

From January 29, 1935, to March 12, 1935, hoop nets and gill nets were operated in suitable parts of Lake Mindemoya and Lake Manitou, Manitoulin Island, for the purpose of removing ling during their spawning season. As a result, 2,431 ling were removed from Lake Manitou and 80 from Lake Mindemoya. The average weight of the ling taken from these lakes was 6 pounds and the total weight of ling removed was 15,066 pounds.

From December 21, 1934, to January 28, 1935, similar work was conducted in the following waters in Leeds and Lanark counties with the following results:

	No. of Ling Removed	Average Weight	Total Weight
Pike Lake	727	8	5,816
Bennet's Lake	199	5	995
Christie's Lake	334	8	2,672
Otty Lake	718	3	2,154
Otter Lake	26	4	104
Rideau Lake	415	5	2,075
			<hr/> 13,816

The removal of ling from these waters is valuable, in view of their known depredations on game-fish.

EXPERIMENTAL HATCHERY

In conjunction with the Branch laboratory, facilities were provided for carrying over limited quantities of fish in an experimental hatchery, a miniature of the standard hatchery provided with standard hatchery equipment. The hatchery was established for the purpose of continuing studies on the nutritional requirements of trout, the diseases of fish, and to check various phases of hatchery practice.

ACKNOWLEDGMENTS

In conclusion I desire to express my appreciation of the assistance and support rendered to the Department during this period. More particularly would I mention the various Fish and Game Protective Associations and allied organizations throughout the Province, the officers and members of which have at all times displayed keen interest in our work and exhibited a desire to see that the legislation for the administration of which we are responsible is equally fair to all concerned, and to this extent have therefore encouraged the Department in its efforts by an impartial administration to secure, as far as possible, proper observance of Game and Fisheries Regulations and thus promote improved conditions in the Province.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries.

Toronto, April 2nd, 1936.

Thirtieth Annual Report

OF THE

**Game and Fisheries
Department**

1936-1937

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
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TO THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirtieth Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1937.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,

*Minister in Charge,
Department of Game and Fisheries*

Toronto, 1938.

THIRTIETH ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:—

I have the honour to submit to you in this and the following pages the Thirtieth Annual Report of the Department of Game and Fisheries, outlining the activities of Departmental services for the fiscal year ended March 31st, 1937. The various comparative tables included in this Report, and the appendices thereto will be of interest when read in conjunction with other portions of the Report as an indication of the success and progress which has been made in the administration of the wild life division of the provincial natural resources.

FINANCIAL

At the outset it is perhaps advisable to refer to the financial position of the Department, and it gives me a great deal of pleasure to present herewith the statement of revenue produced under this Department during the fiscal year reported upon, specifying the various sources from which this revenue is secured together with the sum derived therefrom in each instance.

ORDINARY REVENUE FOR THE FISCAL YEAR ENDING MARCH THIRTY-FIRST, 1937.

GAME—

Royalty	\$80,830.70
Licenses—	
Trapping	\$28,371.25
Non-resident Hunting	73,937.50
Deer	59,351.25
Moose	2,981.00
Gun	71,526.01
Dog	3,955.30
Fur Dealers	29,737.00
Fur Farmers	7,335.50
Tanners	190.00
Cold Storage	133.00
Hotel and Restaurant	10.00
	277,527.81
	\$358,358.51

FISHERIES—

Royalty	10,526.10
Licenses—	
Fishing	\$100,924.34
Angling	272,690.50
	373,614.84
Sales—spawn taking	216.61

384,357.55

GENERAL—

Tourist Licenses	\$4,950.00	
Guides' Licenses	6,716.00	
Fines	11,271.15	
Sales—Confiscated articles, etc.	10,279.12	
Rent	3,222.58	
Commission	2,113.69	
Miscellaneous	949.03	
		<hr/>
		\$39,501.57
		<hr/>
		\$782,217.63

The total receipts in the previous year amounted to \$683,938.72 and it will thus be noted that the revenue for 1936-37 shows an improvement of \$98,278.91. Of this increase \$83,592.09 is attributable to the enlarged sale of non-resident angling licenses, while in the game division improvements in some branches were completely nullified by reason of the fact that revenue from royalties, principally on the pelts of fur-bearing animals, showed a decline in excess of \$30,000.00, and a large proportion of which decline may be attributed to the entire close season which prevailed on beaver with the resulting lack of royalty revenue accruing from pelts of this particular species of fur-bearer. The complete picture, nevertheless, is a notable one and it might here be stated that the revenue collected this year has never been excelled in any previous year.

Departmental expenditures totalled \$474,128.95, so that our operations for the year resulted in a surplus of \$318,088.68. Principal expenditures were made on the enforcement service, \$188,810.36; fish hatcheries \$141,263.55; construction \$27,997.38, work being undertaken at the Trout Rearing Stations at Chatsworth and North Bay, Ingersoll Ponds, Manitoulin Bass Ponds, Midhurst Ponds, and the Sarnia and Wiarton Fish Hatcheries; Bird Farms and Experimental Fur Farm \$9,197.15; and Wolf Bounty \$33,360.63.

It is generally conceded that the excellent fishing and to a somewhat lesser degree (which may possibly be attributed to the more vigorous weather conditions which prevail in the season) the hunting which are available in Ontario to the visiting sportsman are among the attractions responsible for the current increase in tourist traffic to the Province, and the importance of this tourist business is quite obvious. Money spent by our visitors is neither localized nor centralized but accrues in some measure to the benefit of every man, woman and child in the Province. Therefore, it is at present, and will continue to be an objective of this Department, by means of an extensive and intelligent re-stocking programme, and by reasonable protective measures designed to conserve the supply to perpetuate the resources and privileges which now encourage non-resident tourists to vacation within our borders.

GAME

The table which follows will show in detail what various hunting licenses, resident and non-resident, were issued during the year compared with information of a similar nature covering recent previous years. Noticeable increase will be observed in the number of non-resident hunting licenses which were issued during the year when compared with the number issued in 1935-36. This increase resulted in the collection of additional revenue from this particular branch of our activity amounting to \$20,857.50.

	1933	1934	1935-36	1936-37
Resident Moose	673	512	496	542
Resident Deer	12,756	12,890	14,779	15,394
Resident Camp (Deer)	165	175	258	262
Resident Farmers' (Deer)	5,113	4,902	5,221	5,386
Resident Gun	97,561	76,210	85,884	79,531
Non-resident small game	318	489	686	1,129
Non-resident deer		475	652	848
Non-resident "General"	634	457	680	878

The following pages will contain a summary of conditions as they apply to both our animal and bird game life, and which information has been compiled from the reports of these conditions submitted by various members of the field service staff of the Department stationed throughout the Province:—

DEER:—So far as the northern and northwestern portions of the Province are concerned reports to the Department indicate that, while the situation there has many problems peculiar to the area itself, conditions as they existed during the period under review were quite satisfactory, with some possible improvement and increase in numbers in certain sections.

In the southwestern part of the lower portion of the Province, some increase is reported, probably due to the protection which has been afforded to them over a period of years, and while they are most numerous in the Counties of Simcoe, Grey, Bruce and Huron, there are evidences that these animals are to be found in practically every County in the section to which this reference pertains, and in the not too distant future may possibly reach the point where they may constitute a source of trouble to farmers and market gardeners. While the conservation measures now in effect have been provided for the purpose of protection they do not contemplate the development of our deer resources to such an extremity as is here indicated. In the central Counties they may be found in fair numbers only in Peterborough and Victoria, with slight improvement though continued scarcity reported from Halton, Peel, Northumberland and the north part of Ontario Counties. East of and including Hastings conditions were better, and they are to be found in numbers providing fairly satisfactory hunting in practically all the areas here in which an open season prevails. In the section in which the most intensive concentration of deer hunters occurs during the regular open season, i.e. Parry Sound, Muskoka and Haliburton, conditions are reported to be satisfactory and as yet good hunting is available there.

Undoubtedly the restrictions which apply to deer hunting continue to be necessary and must be observed and regulate the conduct of hunters if we are to preserve and improve our deer herds throughout the Province, and which condition is essential in order to guarantee and justify a continuation of the fall hunting season in which many of the sports loving public are privileged to participate.

In recent seasons we have been seeking the co-operation of deer hunters by asking them to submit a return to the Department of the result of their hunting together with comments. In the past the number of hunters making this return has been disappointing. Seeking an explanation for this apparent indifference on the part of sportsmen we came across a letter from a hunter which reads in part; "A lot of the boys won't make this return because they are afraid you will use the information to send tourists or others to their favourite hunting grounds. Why don't you tell them the real reason for the return?" The answer to this query is that it is necessary the Department should know the number of

deer of both sexes killed annually, the locations where they are to be found in largest numbers, and the territories where they are obviously scarce, in order that suitable regulations for their conservation may be framed. With over twenty thousand hunters in the bush each fall a means is provided for obtaining reliable information of our deer herds not otherwise available. A brief reflection will convince the hunter that this information is wholly in the interest of sport.

MOOSE:—These animals are not at all plentiful in any part of the Province and little improvement is evident even in the southern part where they have had the complete protection of an entire close season for the past several years. Reports from this Section are to the effect that if there be any increase such conditions can be attributed to any overflow from Algonquin Park. From northern Ontario where hunting of moose has been permitted in conjunction with the deer season reports reaching the Department indicate some scarcity and the desirability of the additional protection of an extended close season in some areas to preserve and thereby provide for improvement and increase in the numbers of this species.

CARIBOU:—These animals are very scarce and are to be found only in the extreme north. Herds are reported only in the northern portion of the Cochrane District and in a few scattered sections of the Thunder Bay and Kenora Districts.

ELK:—The original shipments of these animals to Ontario from Western Canada were supervised by the Federal National Parks Branch, and on arrival here were placed in the following Crown Game Preserves, viz;—Pembroke, Burwash, Chapleau, Nipigon-Onaman and Goulais River-Ranger Lake. Reports indicate there has been more or less improvement in all instances save possibly among those placed in the Nipigon-Onaman Preserve. From the herd at Pembroke certain animals have been distributed to suitable areas in Algonquin Park and on the Bruce Peninsula, while a number of Elk on the Burwash Preserve were liberated in that area, and as far as possible the animals so transferred were set at liberty some considerable distance from farm property. Improvement in numbers has been observed among the animals transferred to Algonquin Park and the Bruce Peninsula, while from Pembroke is reported a fair increase, and a fine showing of young animals from Burwash.

RABBITS:—All varieties were reported to be rather scarce throughout the northern areas. Reports received from the various portions of southern Ontario reveal there is no scarcity of either the cotton-tail rabbit or the European hare (commonly called the jack rabbit) in the western Counties, and some satisfactory hunting was enjoyed here. Conditions, however, were not as favourable as this in the central Counties, while a noticeable lack of numbers was reported from the east and the northern districts of Parry Sound, Muskoka and Haliburton.

It is interesting to note from these reports that the jack rabbit is migrating northwards. Existence of this species in Muskoka has been observed and it is possible that the pleasure and recreation which the pursuit of this creature of the wild has provided to sportsmen in the southwestern Counties may soon be available to the interested hunters farther afield.

PARTRIDGE:—Ruffed grouse are reported to be scarce in practically every section of the Province though some increase in their numbers was noted in the eastern portion of northern Ontario, and in some scattered areas in the western portion of the north.

The sharp-tailed grouse, or prairie chicken, display conditions which are no better, but practically similar to those which exist with reference to the ruffed grouse.

The complete close season which has prevailed on partridge is absolutely necessary in order that the various species may have an opportunity for replenishment.

The condition of scarcity existing at this time is one which prevails periodically and has been the subject of many investigations and reports. Quite recently a paper dealing with fluctuations in the numbers of ruffed grouse and having special reference to this condition in Ontario, was prepared by C. H. Douglas Clarke, of the University of Toronto, Department of Biology. From this report it would appear that these periods of diminution do not occur simultaneously throughout the country, and even in this Province there are local differences of at least three years in the time at which diminution commences. Each period of diminution is preceded by comparative abundance and followed by comparative scarcity so that the conditions of the ruffed grouse population over the sixty years for which data are available may be expressed as a periodic cycle of between nine and ten years.

QUAIL:—These birds occur in only a small portion of the Province. They are reported to be fairly numerous and their numbers increasing in some Counties in the southwestern peninsula, notably Essex, Kent, Elgin, Middlesex and Lambton. Reports of their existence in other portions of southern Ontario do not indicate any improvement, and it is quite probable that there are few, if any, areas outside of the Counties enumerated in which these birds may be encountered. A few pairs of these birds were distributed during the year by the Department in the Counties of Essex, Middlesex and Norfolk.

PHEASANT:—The Department continued its work along the lines of the establishment of this excellent upland game bird in areas suitable to its existence. This branch of activity included the distribution of eggs and the liberation of live birds in proper areas, with more concentration and emphasis on the live bird phase of this activity. Records show that some 1,146 settings of eggs, or 17,190 eggs in all, were shipped to various applicants. Of these, 640 settings were sent to parties located in southwestern Counties and 280 settings to parties in Counties along the northern shore of Lake Ontario and the River St. Lawrence. The remainder was practically all distributed in Counties immediately north of these areas.

A total of 2,803 live birds, including a few of the mutant variety, were liberated in connection with this branch of our re-stocking activities, and of this total 1,401, or fifty percent, were placed in the southwestern Counties, 946 in the southerly eastern Counties, and the balance in areas immediately adjoining these Counties to the north.

This distribution of live birds was augmented by reason of certain conditional loans to breeders under which live birds raised by them to the number of 1,287, included in the distribution figures above set forth, were made available to the Department for use in connection with our general programme of re-stocking.

The Department is deeply appreciative of a donation of mutant pheasants received from the Ohio State Department of Conservation, and which birds were liberated on Pelee Island.

It is believed that the value to the farmer of the various species of upland game bird is becoming more obvious as we learn of the life history and activity of these birds. They provide the farmer with efficient and effective service as insect killers and weed destroyers. It is therefore apparent that game birds on the farm are a real asset, both from the standpoint of service and that of beautifying the farm. To be effective, however, they must be given consideration with regard to food and coverage, and in addition to this must be controlled against overpopulation consistent with the available supply of food lest they become a pest. This control is best exercised by legalized and seasonable fall shooting restricted as to season and bag limits established in accordance with the number of birds available. This control is a matter for mutual understanding between the sportsman and the farmer, for the game is the property of neither the farmer nor the sportsman, but with the proper spirit of co-operation is available with advantage to both.

DUCKS:—Reports indicate that these birds provided good sport throughout the Province, notwithstanding that general conditions which applied to their propagation throughout the Dominion as a whole resulted in additional restrictions being imposed by the Federal Government under the Migratory Birds Convention Act, which is the legislation applicable to these birds, such as a more limited open season, a reduction in the daily bag limit from 15 birds to 12 birds, and a provision under which the use of live birds as decoys was prohibited. Conditions were perhaps somewhat improved as a whole, notwithstanding some reports to the contrary from a few sections.

GEESE:—This species provides shooting in only a very few sections of the Province, particularly in the extreme north, along the James Bay shore, and in the southwestern Counties, from which areas favourable reports are received. The Federal restrictions as referred to in the case of ducks were also applicable to geese, though these regulations as promulgated permitted a limit of catch in the case of geese of five birds per day and not more than fifty per season.

POLOVER:—This bird continues to be very scarce in every section of the Province. But little improvement has been reported and only in a few scattered areas.

SNIBE:—Reports show extreme scarcity of this species in northern Ontario, though there is some evidence they are more prevalent and show some improvement in the southern end of the Province, and particularly in the eastern portion.

HUNGARIAN PARTRIDGE:—This, of course, is not a native species, but was introduced to the Province some years ago, and liberated in various sections with the idea of providing additional shooting for sportsmen. No active re-stocking was undertaken by the Department during the year under review, and there is little evidence of improvement except in scattered areas in some eastern and southwestern Counties from which reports of increased numbers have been received.

WOODCOCK:—This species is reported to be fairly plentiful in various sections, particularly in the central and western portions of the southwestern peninsula, notably Elgin, Essex, Norfolk and Oxford, and in some of the eastern Counties.

Before closing this section of the report reference is made to the fact that regulations were passed which provided special open seasons and established conditions to govern, as follows:—

- (a) Pheasants—Peelee Island, October 22nd, 23rd, 29th and 30th. Limit of five birds per day.
- (b) Pheasants and Quail—Essex, Kent and Middlesex Counties, October 22nd and 23rd. Limits of catch, two pheasants and three quail per day.
- (c) Pheasants—Lincoln, Welland and Haldimand Counties, October 22nd and 23rd. Limit of two birds per day.
- (d) Deer—Carleton County west of the Rideau River, November 5th to 20th. General deer hunting regulations applied.
- (e) Deer—Townships of St. Edmunds, Lindsay, Eastnor and Albemarle on the Bruce Peninsula, November 16th to 21st. General deer hunting regulations applied except that the use of dogs was forbidden.

FUR BEARERS

Conditions as they apply to fur-bearing animals throughout the Province and as they have been briefly summarized from reports received in the Department are set forth in the following references:—

BEAR:—These animals were reported to be quite numerous throughout the entire northern portion of the Province as well as in the more northerly areas of southern Ontario, which provided a degree of hunting much appreciated by those interested in this branch of the sport.

BEAVER:—The sectional close season of previous years was made effective throughout the entire Province, and the increase in the numbers of these animals which has been reported from various districts can in all probability be attributed to this protective action. In practically all areas in which beaver have existed in the more recent years there has been some improvement in the conditions applicable to this desirable species of fur-bearing animal and in consequence of the complete protection which is now being provided this improvement should not only continue but become more evident.

FISHER:—Existing conditions which apply to this species of valuable fur-bearer are not at all favourable in any area. These animals are, generally speaking, very few in number and the sections in which any improvement has been observed and reported are but few and scattered.

FOX:—The several varieties of this species, in the wild, i.e., red, cross and silver, continue to be generally about the same as in recent years. Quite naturally conditions vary in the different portions of the Province and while improvement is noted in some parts this has served only to balance the reduction in their numbers which has been reported from other areas.

LYNX:—Here, as in the case of the fisher, conditions are not at all favourable, though it should be stated in reference to this species that no protection in the way of a close season is provided, and they may be taken any time during the period covered by the general trapping season. While some slight improvement is reported from Northern Ontario, general conditions do indicate that this particular species is doing no more than maintaining the levels of recent years.

MARTEN:—These animals are practically extinct in the southern portion of the Province, and they continue to be extremely scarce in northern Ontario, with some slight improvement being reported from the eastern section thereof.

MINK:—Reports from practically every section of Ontario warrant the assumption that mink are becoming less plentiful. Comparisons show that the catch of mink taken by licensed trappers again shows a considerable decline during the season reported upon.

MUSKRAT:—There is no doubt that in many areas which have previously supported this desirable little fur-bearer, natural conditions are becoming unfavourable. The fluctuation of water-levels and possible lack of food supply are having an adverse effect. Conditions may be described as only fair, and throughout the Province generally show no improvement. There has been a progressive decline in the number of the annual catch in recent years, as an examination of the sub-joined comparative table will show.

OTTER:—Conditions here continued to be about the same as in more recent years. While these animals are still scarce they appear to be holding their own under the existing regulations which apply, and as a result a special Order was provided declaring an open season on this species extending from November 1st, 1936, to February 28th, 1937, and which open season, of course, coincided with that provided in the Game and Fisheries Act in the case of mink and fisher, as well as fox and marten.

RACCOON:—These animals are found only in Southern Ontario, and general conditions here are about as usual. While reports from some areas indicate improvement, this is not generally the case, for in many southwestern counties their numbers are reported to be somewhat limited and possibly diminishing.

SKUNK:—The catch as reported to the Department through the regular channels shows quite an increase as compared with that of the previous year, and this pestiferous and objectionable little creature continues to be quite plentiful throughout the Province. Market prices which have prevailed for their pelts have not been sufficiently attractive to encourage any extensive trapping operations in the case of this particular species.

WEASEL:—This species continues to be plentiful. While the pelt is of considerably less value than was formerly the case, the catch shows a decided increase over that of the previous year. Nevertheless a review of reports to the Department reveals the fact that this condition does not justify the belief that there has been any great general increase in their numbers throughout the Province.

SQUIRREL (Black and Grey):— These animals are quite numerous in the southern Counties and more particularly is this applicable to the western portion. They were afforded the protection of an entire close season which condition in all probability contributed in a large extent to the improvement evident in the numbers of these varieties of the squirrel species.

At this point it is desired to make some general comments on trapping conditions.

So far as Southern Ontario is concerned, except for a few scattered districts, trapping can no longer be regarded as providing remunerative employment to any great extent. Fox-hunting as a sport is enjoyed in many sections as is evidenced by the large number of special permits which are issued for this purpose and while considerable numbers of skunk and weasel are taken the financial returns received from the sale of these pelts by the trappers concerned are not at all impressive. The more valuable, and therefore the more desirable, species are becoming very scarce. Lynx, marten and fisher are practically non-existent in the south; beaver which appear to be improving are, of course, provided the protection of a complete close season throughout the entire Province; while conditions which apply to mink, otter and raccoon are not at all favourable. Fox, as has been previously stated, are responsible for some good hunting in addition to the trapping made available by their numbers, and in some scattered sections fairly good muskrat trapping is still available if satisfactory weather conditions prevail just previous to and during the open season.

In Northern Ontario during the year reported upon while conditions were naturally better than those reported from Southern Ontario, they showed no improvement over those which have been in evidence there in the more recent years. Licensed trappers in this northern section are restricted as to the area in which they may carry on their trapping operations, each being allotted a specific territory for his own use. It is anticipated that this system will encourage each individual trapper to practice conservation and protection in his own territory, as a means of assisting to perpetuate the various species of fur bearers therein.

The protection which present Regulations provide for the more desirable classes of fur-bearing animals, particularly along the line of short and restricted open seasons during which periods only they may be lawfully trapped, is very necessary, and furthermore the compliance of all concerned with the various Regulations which govern is not only essential but must be forthcoming, and while the experienced trapper may not in all instances be favourably disposed to the various restrictions which now apply to fur-bearing animals and the trapping thereof, full co-operation with the Department along these lines is absolutely necessary if we are to be expected to maintain these animals at their present levels, without imposing further restrictions.

The following comparative table shows the numbers of pelts of the various species of fur-bearing animals exported from and dressed within the Province

during the year now reported upon and the two years previous, and upon which royalty was paid as required by provisions of the Game and Fisheries Act:—

	1933-34	1935-36	1936-37
Bear	341	411	476
Beaver	10,336	6,785	238
Fisher	1,297	2,137	2,117
Fox (cross)	2,224	5,424	4,156
Fox (red)	13,534	37,044	35,232
Fox (silver or black)	280	500	360
Fox (white)	89	883	17
Fox (not specified)	85	495	276
Lynx	2,138	2,642	2,081
Marten	1,096	1,282	1,464
Mink	63,615	47,057	33,930
Muskrat	521,751	398,043	370,239
Otter	3,330	3,701	3,779
Raccoon	18,673	13,259	14,243
Skunk	73,721	50,747	87,950
Weasel	68,164	42,643	78,643
Wolverine	5	4	2
	<u>780,679</u>	<u>613,057</u>	<u>635,203</u>

From information which was secured from reliable sources the Department has computed the value of these pelts to be some \$1,902,407.90, which was practically the same, (as a matter of fact only four thousand dollars less), as the figure produced by the catch of the previous year. This figure, of course, is the actual value of the fur catch to the trapper.

This total does not include the product of licensed fur farms from silver, black and blue foxes and mink, the pelts of which ranch raised animals are exempt from the payment of royalty, under the Game and Fisheries Act. It will be of interest to note that during the year 1936-37 licensed fur farmers marketed 28,619 silver and black fox pelts, 24,297 exported and 4,322 tanned; and 15,691 mink, 15,623 exported and 53 tanned; which pelts together with the few blue fox pelts marketed have been computed to have realized the total sum of \$1,067,848.32 on behalf of our fur-farmers.

FUR FARMING

The propagation of fur bearing animals in captivity on licensed fur farms has been established and developed as an industry to the stage where in point of values accruing from the product thereof it is beginning to threaten the production of fur from our wild life natural resources, and the time is probably not far distant now when the value of the annual product of our licensed fur farms will exceed that of the catch of our licensed trappers from the wild. Some native species can be successfully propagated in captivity, and while the results which have been evident to date perhaps do not suggest much in the way of economic possibilities, experiments still continue though undoubtedly not to the same extent as in previous years. It has been found that other species are not adaptable to domestic propagation with a corresponding absence of satisfactory results. Consequently, for the present, fur farmers would appear to be devoting the major portion of their efforts to work with foxes principally silver and black, and to mink, they being the only species raised in substantial quantities.

While the prices which furs brought in the open market did not offer much encouragement to prospective fur farmers, faith in the future of the industry induced some to commence operations, which is apparent from the fact that the number of fur farms operating under license during the year 1936 increased practi-

cally nine percent, there being 1,348 licenses issued, while breeding stock figures show an increase of ten percent in silver foxes, and an increase in excess of twenty-six percent in mink.

SUMMARY OF BREEDING STOCK ON LICENSED FUR FARMS
AS AT JANUARY 1ST

	1935	1936	1937
Beaver	78	70	21
Fisher	19	16	20
Fox (cross)	434	367	257
Fox (red)	286	228	207
Fox (silver or black)	19,314	21,645	23,869
Fox (blue)	10	5	0
Lynx	2	2	2
Mink	8,605	12,332	15,539
Muskrat	447	375	351
Raccoon	799	524	358
Skunk	0	3	5
Bear	11	21	15
Marten	9	4	4

Much of the research and experimental work previously performed at the Provincial Experimental Fur Farm at Kirkfield has been curtailed or discontinued. All laboratory equipment was transferred to the Ontario Veterinary College, at Guelph, which is more favourably located, and at which institution facilities have been made available for such biological and post mortem services as may be required by the licensed fur farmers.

CROWN GAME PRESERVES

During the period under review the work of establishing small game preserves in Southern Ontario was continued. Through the co-operation of the landowners, sportsmen and the Protective Associations excellent progress was made in selecting suitable areas. As a result some twenty-six preserves were set aside in seventeen different Counties. In addition a preserve of approximately 100,000 acres was established in the District of Nipissing. This brings the total preserve areas in the Province to 111 with an area of approximately 6,061,289 acres, or 9,471 square miles.

The Preserves set aside have been properly posted with metal signs and the publicity given them has resulted in a larger measure of protection from both the public and the interested landowner. Considerable stocking of ring-necked pheasants was carried out in these new areas with good results from the standpoint of propagation.

The following tabulation shows the Preserves added during the year:—

Designation	County	Extent in Acres
Holmedale	Brant	270
Paris	Brant	860
Kinloss	Bruce	1,000
West Lorne	Elgin	3,300
Wyandotte	Essex	1,017
Ojibway	Essex	1,440
Sheppards Lake	Grey	200
Keppel	Grey	1,650
Holland	Grey	845

Designation	County	Extent in Acres
Wallaceburg	Kent	1,400
Brigden	Lambton	5,750
Niagara	Lincoln	400
Thorndale	Middlesex	850
W. E. Saunders Sanctuary	Middlesex	614
Jocko	District of Nipissing	100,000
Varency	Norfolk & Haldimand	1,300
Turkey Point	Norfolk	1,200
Mud Branch	Oxford	2,000
Cedar Creek	Oxford	800
Petawawa Point	Renfrew	500
Conestogo	Wellington	1,475
Guelph	Wellington	1,000
Humberstone	Welland	900
Willoughby Park	Welland	1,200
Bertie	Welland	1,000
Markham	York	2,000

WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty statistics covering the four last fiscal years:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Oct. 31, 1933.	1,112	1,229	43	2,384	\$53,433.88
For year ending Oct. 31, 1934.	990	812	57	1,859	27,080.65
For year ending Mar. 31, 1936.	1,159	1,713	33	2,905	42,399.89
For year ending Mar. 31, 1937.	1,090	1,197	31	2,318	33,360.63

During the year some 1,699 claims for wolf bounty in respect of 2,347 wolf pelts, were submitted to the Department for consideration. Fifteen claims, involving 29 pelts were disallowed for various reasons, including seven in which pelts proved to be those of dogs, five fox pelts, six unborn pups taken from the carcass of the mother by the claimant, and five coyotes imported from the Western Provinces, the claimant in this case being prosecuted and convicted. Details as to the sources of origin of the pelts submitted for bounty are outlined in the succeeding table—

SUMMARY OF PELTS RECEIVED

District or County	Adult Wolves		Pups	Total
	Timber	Brush		
Algoma	93	166	3	262
Bruce	23	13	0	36
Carleton	2	2	0	4
Cochrane	19	1	0	20
Frontenac	10	0	0	10
Haldimand	0	3	0	3
Haliburton	18	0	0	18
Hastings	3	4	0	7
Huron	0	1	0	1
Kenora	235	276	1	512
Lambton	0	2	0	2
Lanark	2	4	0	6
Lennox & Addington	14	0	0	14
Manitoulin	12	119	9	140

SUMMARY OF PELTS—(Continued)

District or County	Adult Wolves		Pups	Total
	Timber	Brush		
Muskoka	28	2	0	30
Middlesex	0	2	0	2
Nipissing	71	36	6	113
Norfolk	0	5	0	5
Ontario	1	0	0	1
Parry Sound	82	8	0	90
Patricia	62	57	5	124
Peterborough	3	0	0	3
Rainy River	133	214	6	353
Renfrew	28	1	1	30
Simcoe	6	3	0	9
Sudbury	86	131	0	217
Thunder Bay	148	157	10	315
Temiskaming	12	4	0	16
Victoria	1	1	0	2
Welland	0	1	0	1
York	0	1	0	1
Totals	1,092	1,214	41	2,347

It will be noted that the total amount expended was \$33,360.63 of which the sum of \$33,287.00 was the amount actually paid to bounty claimants, as shown by the following statement:

Brush Wolves (Counties)	41 @ \$ 6.00	\$ 246.00	
(Districts)	1,156 @ \$15.00	\$17,340.00	
Total Brush	1,197		\$17,586.00
Timber Wolves (Counties)	89 @ \$ 6.00	\$ 534.00	
(Districts)	1,001 @ \$15.00	\$15,015.00	
Total Timber	1,090		\$15,549.00
Pups (Counties)	1 @ \$ 2.00	\$ 2.00	
(Districts)	30 @ \$ 5.00	\$ 150.00	
	31		\$ 152.00
Total	2,318 pelts		\$33,287.00

Payment of the full bounty of \$15.00 is assumed by the Provincial Treasury in respect of wolves destroyed in provisional judicial districts, while in the case of these animals which are destroyed in the southern counties the bounty is paid by the County Treasurer, forty percent of the amount being assumed by the Province and subsequently rebated to the Counties.

Trappers and farmers are responsible for eighty percent of the wolf pelts forwarded for bounty, while an examination of the reports as to the methods which were adopted for capturing the animals reveals that forty-five percent were snared, twenty-five percent trapped, and nineteen percent shot, while the authorized use of poison was responsible for the taking of only two percent.

NEW DEVELOPMENTS

MONTHLY BULLETIN

In August, 1936, the first issue of what was proposed to be a regular periodical bulletin was issued and distributed among provincial newspapers, officers of Game and Fish Protective Associations and sportsmen who have been sufficiently interested to ask that their names be included on the mailing list. The Honourable Mr. Nixon's letter which introduced this publication and which appeared in the first issue contained the following references viz:—

"In presenting this, the first of what we hope will be a monthly bulletin, we have in mind an extension of the publicity work by which we are endeavouring to make the people of the Province more deeply conscious of the valuable heritage we possess in our wild life natural resources, and the necessity for conserving these resources.

"We appreciate the co-operation of the Sportsmen's Associations throughout the Province, as well as the individual co-operation of all those who, from an aesthetic or recreational standpoint, are interested in the wild life.

"With a view to fostering this spirit of co-operation it is our desire to convey to the public all the information in the possession of the Department concerning wild life resources of our forests, lakes and streams, and we hope that a wider knowledge of conditions will result in a keener realization by the individual of his own responsibility for the protection of these important assets."

Various interesting extracts from the material which was published in the issues of this publication during the months now being reviewed have been incorporated, with advantage, in this particular annual report of Departmental activities, and indicative of the interesting information which appears in this Monthly Bulletin is the following extract from the issue of January, 1937—"Non-resident Angling Licenses: The value of the Tourist Industry to the Province has been emphasized in a previous issue of the Bulletin. Its importance becomes more and more evident each year as records are made available and data in connection therewith is systematically tabulated. The Department of Game and Fisheries exacts a license fee from non-residents who desire to fish in the Province. A tabulation of the licenses issued divulge some very interesting information. Returns show that a total of 48,097 non-resident angling licenses were issued during 1936. This total does not by any means represent the number of visitors fishing within the Province. It is provided by the regulations that 'Children under the age of twelve years may angle without a license, when accompanied by a member of his or her family who is in possession of a non-resident angling license.' Further provision is made for the issuing of a special Family License covering a husband, his wife and their children not over the age of twenty-one years, at a fee somewhat higher than that for an individual license. Of the total number of licenses issued 12,810 were Family Licenses.

"As each licensee furnishes the Department with his name and address it is possible to compile a distribution of the different States and countries represented by the license holders. It is interesting to note that every State in the American Union with the exception of Idaho, Oregon, Utah and Wyoming had representatives fishing in Ontario during the summer of 1936. The nearby States of Ohio, Michigan, New York, Pennsylvania and Illinois sent us thousands of sportsmen, the others contributed lesser numbers in direct ratio to their geographical locations. The Provinces of Canada, from British Columbia to Quebec supplied their quotas of visiting anglers but the Maritimes are not represented. Most interesting of all, however, is the information that fishing licenses were sold to visitors from such widely separated parts of the world as England, Java, Porto Rico, Australia, East Africa, Panama, Hawaii, India and the West Indies."

Owing to the provisions of the Regulations under which non-resident angling licenses are issued, and more particularly the conditions which govern the use of these licenses to which previous reference has been made, figures are not available showing the actual number of non-resident anglers, though it has been estimated that under the licenses issued during the year a grand total of more than 68,000 non-residents legally enjoyed the recreational advantages of the excellent fishing which is available in the waters of this Province.

TOURIST OUTFITTERS' CAMP LICENSES:

In accordance with a suggestion which was submitted for the consideration of the Fish and Game Committee of the Legislative Assembly by the organized

tourist outfitters, provision was made for the first time to license tourist outfitters operating throughout northern Ontario and in those portions of the Districts of Parry Sound, Nipissing and Haliburton and the County of Renfrew lying north of the line of the Canadian National Railway from Parry Sound to Pembroke. In all some four hundred and twenty-seven camps were licensed, eighty-three in the District of Kenora, twenty-seven in the District of Rainy River, two in the District of Patricia, nineteen in the District of Thunder Bay, sixty-six in the District of Algoma, thirty-eight in the District of Sudbury, thirty-two in the District of Manitoulin, seventy-nine in the District of Nipissing, seventy-four in the District of Parry Sound, and seven in the County of Renfrew. Of this total three hundred and eighty-eight were operated by residents of the Province under license issued at a fee of \$10.00 each, while the balance of thirty-nine were operated under license issued to non-residents at a fee of \$25.00 each.

The regulation of these camps will be of a supervisory nature, while a degree of protection from undue encroachment will be afforded those who already have made large investments in the establishment of permanent camps. The licensing of these camps will also be of much assistance to the Department in the protection of the fish and game resources, because it places an added responsibility on the owners to see that law observance is maintained so far as each individual camp is concerned. As the license is renewable yearly it is obviously in the interest of the licensee to see that his operations are conducted in such a manner that the best possible service and accommodation will be afforded the tourist at rates consistent with the class of service rendered.

From the standpoint of the owner or operator much benefit should accrue. Embodied in each application for a license is a questionnaire asking for information in connection with the camp which might be available for the Department to disseminate to tourists. The answers provide information as to the number and kind of cabins, the various kinds of boats, number of available guides, names of adjacent lakes and rivers, kind of fishing, adjacent hunting territory, species of game to be had, nearest Provincial Highway and distance therefrom, nearest railway, and any other general information the operator may care to supply. This information when received is not only tabulated for the use of the Department of Game and Fisheries but is also passed on by us to the Provincial Tourist and Publicity Bureau which features the tourist advertising work for the Province and responds to thousands of enquiries yearly for just such information as will now be systematically available from the camp operators. This service should prove of very great benefit to those engaged in the operation of tourist camps in that portion of Ontario which is affected, and the supervision exercised under the license will ensure protection for the visitor.

AMENDMENTS TO THE ACT:

Amendments enacted by the Legislative Assembly and which became effective during the year included:

Changes in the regulations which apply to the hunting of deer provided for an additional division comprising the southern portions of the Districts of Algoma and Sudbury and the open seasons which would be effective therein, also for a change in the dates of the open season on Manitoulin Island and made provision for the use of dogs in more liberal proportion.

Prohibited the carrying of high-powered rifles during the deer season in areas inhabited by these animals under the authority of any hunting license except the one issued for the taking of deer, as well as prohibiting the use of snares in any part of the Province during the deer season.

Established by legislation different divisions of the Province in respect to the trapping of muskrats and provided the various open seasons to be applicable therein.

Provided protection for and made unlawful the shooting of ospreys and eagles.

Changes in the regulations which applied to the open season for migratory water fowl, i.e. wild ducks and wild geese, and which changes were practically nullified by the subsequent regulations provided by the Federal Authorities under the Migratory Birds Convention Act and Regulations, which last mentioned Regulations definitely apply to such hunting.

And, finally, as set forth under the previous sub-heading, provided for the licensing of tourist outfitters' camps, and established the license fees therefor.

ENFORCEMENT SERVICE

The Department maintains a regular staff of field officers which numbered some eighty members during the year 1936-37, whose duty it is to enforce and secure proper observance of the various provisions of the Game and Fisheries Act and Regulations, the Dominion Special Fishery Regulations for the Province of Ontario and those Provisions of the Migratory Birds Convention Act and Regulations which are effective in this Province. The services of this regular Field Staff are augmented by the assistance and co-operation of members of the Ontario Provincial Police force and certain seasonal officers whose services are engaged in connection with the matter of providing adequate patrol service along important waters during the spring and fall fish spawning periods and during the various open hunting seasons. The seasonal overseers employed during the 1936-37 period numbered eighty-three in all, and were engaged for varying periods of time, fifteen for general enforcement purposes, seventeen in connection with the open season for pheasants and other birds, five during the deer season, and forty-six during the critical spring and fall fish spawning periods.

That interested sportmen are concerned in this branch of activity is noted by the fact that during this year some 927 offered and were appointed as Deputy Game and Fisheries Wardens and as such were authorized to assist in the matter of securing proper observance of the Game and Fisheries Regulations. While there will probably always be a number of necessary prosecutions it is felt that this, in minor cases, is not a desirable method of securing observance of the Act. It is believed that many infractions are the result of thoughtlessness, and a lack of knowledge concerning the real worth of our wild life heritage.

The activities of the Game Warden are dictated by the necessity for the protection of our resources and the elimination from our sporting activities of the elements of unfairness which characterizes infractions of the Regulations. The good sportsman is always careful to observe the letter and spirit of the law. In doing so he naturally has to curb his desires and restrict his pleasures. It exasperates him, therefore, to see others with less pronounced scruples calmly ignoring the regulations and making light of their actions.

The laws regulate the wise use of available resources, be it game or fish, and an accumulation of minor infractions may be serious for any species or district. The Game Warden is invariably courteous in the handling of what is, after all, a difficult job. He deserves the co-operation of every sportsman and the backing of every law-abiding citizen.

During 1936-37 there were 1,448 cases in which offences against the Game and Fisheries Regulations were committed and in which the offenders concerned were relieved by various officers of articles of sporting equipment as well as the unlawful game or fish which may have been in their possession on these particular occasions. An examination of the reports of these seizures as submitted to the Department reveals that the action was provided by Game and Fisheries Overseers in 1,193 cases, by Deputy Game Wardens in 137 cases, by Provincial Police Officers in 34 cases, and in 84 cases by co-operative action as between our regular overseers, deputy game wardens, and police officers.

A condensed summary of the material thus seized is submitted herewith:—

Live animals	in 14 cases
Birds, game animals and meat.....	in 177 cases
Fire-arms and ammunition	in 491 cases
Fish	in 241 cases
Fishing equipment	in 309 cases
Angling equipment	in 71 cases
Pelts and hides	in 197 cases
Traps and equipment	in 148 cases
Water craft	in 35 cases
Motor vehicles	in 11 cases
Poison	in 3 cases
Lights (artificial)	in 32 cases
Spears	in 47 cases
Miscellaneous articles	in 50 cases

Duplicate entries on one report of seizure, such as fire-arms and game; angling equipment and fish; trapping equipment and pelts, and other combinations of a similar nature account for the apparent discrepancy in the total shown by the above table, viz:—1826, as compared with the actual seizure reports which number 1448.

Departmental records contain evidence of the fact that during the year under review some 1,154 cases were prosecuted through the courts, and convictions were registered in 1,092 of these cases, the charges in the remaining 62 cases being dismissed by the presiding Magistrates. It will be of interest to set forth the following details concerning the responsibility for the prosecutions in which convictions were registered, viz:—Game and Fisheries Overseers in 929 cases, Deputy Game Wardens in 18 cases, Provincial Police Officers in 76 cases, while co-operative action as among overseers, deputy game wardens and police was responsible in 69 cases.

While each officer is required to be impartial and efficient in the carrying out of his duties he is also required to use common sense and courtesy in his treatment of the public. In this respect we would like to express a word of appreciation by saying that we believe those virtues are exemplified by the average field officer in the discharge of his duties. On their behalf and as proof of this, we would like to quote part of a letter recently received from one of our non-resident hunters. It is but one of many the Department receives from time to time acknowledging the courtesy of the average Game and Fisheries Officer.

The letter is dated November 25th, 1936, and is in part as follows:

"I cannot refrain from referring to the marked degree of courtesy experienced when one has anything to do with Canadian Officials. I would even go so far as to say that when one gets on this side of the Peace Bridge the change is quite noticeable. Some distance north of Toronto we were held up by two of your officers and our game record and licenses examined, as was proper, but all of it was done with such perfect courtesy that the experience, so far from being unpleasant, strongly inclined the hunter to co-operate to the fullest possible extent. The fact that a day before a group of American sportsmen had been caught in a bunch of lies, without sufficient hunting licenses, and had parts of one deer sewed inside the carcass of another, indicated that underneath the courtesy there was no lack of efficiency.

"It is no wonder that 99 percent of American sportsmen who go to Canada feel about it as I do. Out of many years of this sort of thing has come my association with Rod and Gun and my sense of gratitude has urged me to write for it without compensation as some small return for the good times and treatment I have experienced in Canada."

THE FISH CULTURE BRANCH

For the purpose of assisting in the maintenance of the fish supply, the Department has launched a vigorous and progressive fish cultural programme. The value and importance of such action is obvious.

Ontario's game-fishing interests are vitally important, and the maintenance of these interests by protecting the normal fish population and by replenishing this population by fish cultural means, wherever necessary, is becoming of practical concern to increasing thousands of our citizens. The healthful and recreational advantages of game-fishing are of extraordinary importance coupled as they are with the direct and indirect financial benefits of the tourist trade, which penetrates almost every branch of industry, thus increasing employment.

The necessity of supplementing the work of nature in maintaining the important commercial fisheries of the Great Lakes and internationally connecting waters is, also, of vital importance. The interest shown by the commercial fishermen themselves is increasingly evident. By means of their able assistance and the efficient work of the Department's spawn-taking crews, the egg collection is becoming more and more successful each year.

This applies equally well to the actual planting or distribution of game-fish and commercial varieties. Methods of planting are based on the information available regarding the life-history of the species propagated. Although our hatchery officers are responsible for this distribution, the assistance rendered in various ways by commercial fishermen, angling fraternities, and individuals interested in the replenishment of our waters is considerable.

HATCHERIES AND REARING STATIONS

During the year a new trout rearing station was constructed in the District of Nipissing, approximately twenty miles north-east of North Bay, off the new Timiskaming highway. This station comprises a hatchery, which will take care of trout from the egg stage to the advanced fry stage. Five raceways are provided for taking care of fingerlings and two large ponds for fingerlings and yearlings. This rearing station will be a most valuable and important asset to this district from the standpoint of more adequate replenishment of suitable waters. Long haulage will be avoided and the fish will be planted in the same watershed and in waters of similar composition to that in which they are reared.

Two additional ponds 50 feet wide by 300 feet long were added to the series at the Chatsworth Trout Rearing Station. This expansion will give a greater opportunity to increase production of sizable trout before they are distributed.

Three small ponds, located on the grounds of the Reforestry Station at Midhurst, were renovated and new and more satisfactory outlet dams were constructed. These ponds are used for wintering trout.

SPECKLED TROUT:

This year the Department adopted a policy of rearing large numbers of trout to yearling and older stage before distribution to natural and suitable waters. The results of this plan were eminently satisfactory and more than 563,000 yearlings and older trout were planted, whereas in the preceding year approximately 35,400 were planted.

In addition to this, 1,053,000 fingerlings were distributed. The entire abandonment of future fry and fingerling distribution is contemplated with the exception of surplus numbers which it might not be possible to accommodate in our nurseries.

A small number of eyed eggs were planted on an experimental basis in inaccessible streams in Thunder Bay District and a few eyed eggs were supplied to the Department of Biology, University of Toronto, for experimental study.

BROWN TROUT:

The Department's plan regarding the re-stocking of streams in southern Ontario with brown trout was outlined in some detail in the previous report. Since brown trout are notional in their habits and difficult to catch, they are valuable for re-stocking suitable waters in thickly populated areas.

Every year more encouraging reports of angling for this species are received and intensive re-stocking of streams in southern Ontario will undoubtedly give good results in the near future.

Our fingerling distribution exceeded that of the previous year by approximately 38,000 and this number would have been trebled except that 100,000 fingerlings were retained over winter for distribution as yearlings the following year. Propagatory work with brown trout will be intensified.

RAINBOW TROUT:

(a) Steelhead—

Practically the same number of steelhead fingerlings were planted this year as in the one preceding. These were distributed in streams having direct access to larger streams or lakes, since this species has a strong migratory tendency to leave smaller streams in which they are planted in their second or third year. Efforts have been made to establish this species in the lower reaches of trout streams which are no longer suitable for trout on account of the high water temperature prevailing in summer. Trout streams tributary to lakes, somewhat land-locked in character, for example Lake Simcoe, have also been stocked, care being taken to introduce them to streams where dams or other barriers will not interfere with the annual migration to suitable spawning grounds. Large streams in Northern Ontario in which this species has become established are also being stocked.

(b) Fall Spawning Rainbow Trout—

Approximately 3,500 fall-spawning yearlings and older rainbow trout were distributed to waters suitable for them, that is the larger, lower reaches of trout streams. Experience in re-stocking with this strain in waters in the State of Minnesota has shown that it will thrive in the larger and warmer portions of trout streams which are no longer suitable throughout their entire courses for speckled trout and they do not show the same tendency to migrate as the closely related form, the steelhead.

(c) Kamloops Trout —

A fairly large number of adults of this species have been carried over successfully in ponds at Normandale. At the moment it is difficult to state how successful collection of spawn from these breeders will be; this will depend on the fertility of the sexes.

If this close relative of the rainbow trout, which has been described in previous reports, can be established in our lakes, it will be quite desirable, since it is an excellent sporting fish taken on the fly and by trolling. These trout, except during the hot weather of summer, are usually to be taken near the surface. They show no tendency to migrate from the lakes in which they are planted. Lakes suitable for speckled trout supplied with cold spring water from running brooks are considered suitable for Kamloops trout.

LAND-LOCKED SALMON:

The Department was able to secure only a few eyed eggs of this species during the preceding year, and the fish cultured therefrom are being retained.

Some work is being done on a close relative, the Atlantic salmon, to determine whether it will become established in land-locked bodies of water which are suitable for lake trout.

LAKE TROUT:

The majority of the lake trout fry were retained to fingerling size for distribution, and as a result the number distributed exceeded that of the previous year by nearly 3,700,000.

WHITEFISH:

There was an increase of approximately 44.5 per cent over the distribution of the previous year.

HERRING:

An increase of 28.2 per cent. approximately, in the distribution of herring fry over that of the previous year was obtained. A greater production of spawn of the Lake Erie herring or cisco would undoubtedly assist in the replenishment of this important species in that body of water.

YELLOW PICKEREL:

There was an increase in the distribution of pickerel fry amounting to 31 per cent over that of the previous year.

Following previous practice, two million eyed eggs (potential fry) were handled by the Sparrow Lake Hatchery, the fry therefrom being distributed in suitable areas in Sparrow Lake.

SMALL-MOUTHED BLACK BASS:

There was an increase of approximately 12 per cent in fry distribution as compared with that of the previous year. Although there was a decrease in the number of fingerlings as a result of a reduction in the yield from Ingersoll Pond, there was a fair increase in the number of adults distributed.

LARGE-MOUTHED BLACK BASS:

Following the previous year's practice, one pond was operated for large-mouthed black bass production and although there was a decrease in the number of fry, there was a substantial increase in the number of fingerlings produced by this pond, when it is considered that the pond in question is less than one acre in extent.

YELLOW PERCH:

The yellow perch is among the more important commercial species of fish taken in Lake Erie. All the perch spawn collected by the commercial fishermen was cultured in the Kingsville Fish Hatchery and the fry resulting therefrom were planted in suitable habitats in Lake Erie.

MASKINONGE:

There was a reduction in the total number of maskinonge fry planted as compared with that of the previous year. This was due primarily to reduced collection of eggs as a result of such unfavourable factors as unsatisfactory weather conditions, paucity of breeding males, resulting to some extent in ineffective fertilization. Among the chief prerequisites to success of maskinonge propagation is to have a suitable number of males and females spawning simultaneously and a gently rising temperature. Sharp fluctuations in the temperature of the water are detrimental to successful results.

On this Continent unsuccessful attempts have been made to rear lunge to the fingerling stage in appreciable numbers. According to authentic statistics the record number of maskinonge fingerlings produced as a result of pond culture by one of the States of the United States foremost in this field of fish culture was 4,125 in

1931. These fingerlings measured from 3 to 8 inches in length. During subsequent years this number has not been approximated and, in fact, none of the States culturing maskinonge in their hatcheries has since produced in excess of 2,000 maskinonge fingerlings by the pond cultural method.

As a result of a study of this problem in Ontario, it was found that the factors chiefly responsible for unsuccessful attempts to rear maskinonge in appreciable numbers were twofold.

1. The difficulty of supplying adequate and suitable food requisites.
2. The problem of cannibalism.

These two factors must be surmounted and the only way in which this can be done is to study the problem in a practical manner, by experimental rearing in ponds of the fish themselves and of the forms of life which they require for their sustenance.

SANCTUARIES

In view of the limitations of bass and maskinonge culture and to fulfill the requirements of these important species in our waters, their protection in a natural state is essential.

From the fisheries standpoint the sanctuary principle consists in having an area completely removed from public or private use. In view of an ever-increasing tourist trade, fishing for the species under discussion will become more and more intensive and, considering the inaccessibility, ease and speed with which our waters may be fished, it becomes increasingly evident that sanctuaries are necessary. Fish sanctuaries fulfill three important purposes:

1. They give the fish a chance to grow. Fish do not grow by magic and if we want larger and better fish, we must give them a chance to grow and reproduce normally.
2. Sanctuaries act as bases of supply for replenishing outer or adjacent fishing waters.
3. They may be very useful for stock and supply.

It is only within comparatively recent years that this fundamental factor in fisheries' management has been pursued with vigor and during the past few years the Department has made marked progress along these lines.

With these facts and also the conservational principles already discussed in mind, the Department's objective is to bring all feasible measures to bear on the problem of maskinonge and bass maintenance and protection, in order to shorten any gap between supply and demand.

During the past spring and summer a biological survey of the Kawartha Lakes was conducted in order to determine the most suitable water areas adjacent to lakes and streams to set aside as sanctuaries for bass and maskinonge. As a result, the following areas were established on this basis:

(a) In Peterborough County:

Black Duck Lake (Deer Bay), located in the Township of Harvey; Chemong Lake, that portion located in the Township of Smith, Concession 4, Lots 1-3, inclusive;

Duck Ponds (Stony Lake) located immediately east of Gilchrist Bay, between McCracken's Landing and Crow Landing, located in the Township of Dummer;

Katchiwano Lake, that portion located in the vicinity of Lakefield, south of a line drawn from Haig's Point to Webster's Farm, in the Township of Smith;

Little Mud Lake (Chemong Lake) located in the Township of Smith;
Sandy Creek Bay (Buckhorn Lake), located in the Township of Harvey;
Searight's Bay (North River), located in the Township of Belmont;
South Bay (Stony Lake), located in the Township of Dummer;
Taylor's Bay and Munn's Bay (Belmont Lake), located in the Township of Belmont.

(b) **Victoria County:**

Chemong Lake, that portion located in the Township of Emily, Concession 4, Lot 23, and Concession 5, Lots 22 and 23;

Goose Lake, located in the Township of Fenelon;

Goose Lake, located in the Townships of Fenelon and Somerville.

Fishing of any kind is prohibited in these areas, and we believe that they will act as perennial sources of replenishment for the outer waters. In many of the closed areas lunge and large-mouthed black bass live and thrive. In some instances there are mixed environmental conditions, so that small-mouthed black bass is a frequent inhabitant also.

We propose to follow up the action taken by studying the results of this closure from time to time. If there are deficiencies in these closed areas, we propose to remedy these, if possible. For example, conditions in certain areas may be vastly improved by eliminating useless competitors or enemies? A number of areas show distinct possibilities for rearing lunge and bass under controlled conditions.

CLOSED WATERS

In addition to the waters closed for purposes of bass and maskinonge propagation, as stated on pages 20 and 21 the following waters were closed for the protection and natural propagation of the species specified, namely:

(a) **For Maskinonge Propagation:**

BEAVER CREEK:

Township of Marmora, County of Hastings; from Fidler's Rapids to the outlet at Crow River. (This stream was also closed for the propagation of black bass).

BERRY CREEK:

Located on Crown Lands and on Indian Reserve, Territory 32A, before entering Long Bay of the Lake of the Woods, District of Kenora.

(b) **For Speckled Trout Propagation:**

BEAVER CREEK:

Township of Barrie, County of Frontenac, and in the Townships of Anglesea and Kaladar, County of Lennox and Addington.

CHIPPEWA CREEK:

Township of Widdifield, District of Nipissing.

CRAFT'S CREEK:

Townships of Mountjoy, Jessop, and Murphy, District of Timiskaming.

DUCHESNEY CREEK:

Townships of Commanda and Widdifield, District of Nipissing.

ELORA CREEK:

Township of Woolwich, County of Waterloo.

FINN'S CREEK:

Township of Sullivan, County of Grey.

FRASER CREEK:

Township of Cashel, County of Hastings, and in the Township of Effingham, County of Lennox and Addington.

LEE'S CREEK:

Township of Keppel, County of Grey.

LITTLE OUSE RIVER:

Township of Dummer, County of Peterborough.

NIGGER CREEK:

Township of Holland, County of Grey.

RAWDON CREEK:

Townships of Huntingdon and Rawdon, County of Hastings.

ST. JACOB'S CREEK:

Township of Waterloo, County of Waterloo.

SARGENT'S LAKE:

Township of Holland, County of Grey.

SPENCER CREEK:

Townships of Beverly and Flamboro, County of Wentworth.

STURGEON RIVER:

Townships of Medonte and Tay, County of Simcoe.

(This stream is also closed for the propagation of rainbow trout).

TRIBUTARIES TO WILLIAMS LAKE:

Township of Holland, County of Grey.

(c) For Aurora Trout Propagation:**WHITE PINE LAKE:**

Township of Gamble, Timagami Forest Reserve, District of Timiskaming.

WATER LEVELS

In view of the shallowness of the water in which maskinonge, pike, black bass, sunfish, minnows and other forage fish spawn, appreciable fluctuations in water levels over such natural spawning areas are detrimental. The Department has appealed to all those responsible for such operations and the Department of Railways and Canals, which has jurisdiction over the Trent Valley Canal System, was supplied with the following data on the waters under their jurisdiction, namely, the fish frequenting the waters, the spawning dates of the various species, and the spawning depths. As a result we look for definite improvement along these lines and information received from our field officers, or those best qualified to judge, indicate that during the past season considerable improvement was evident along these lines.

REMOVAL OF COARSE FISH:

Between December 19, 1936, and January 31, 1937, hoop nets were operated for the removal of ling from the following waters:

(a) In Leeds County:

Rideau Lake (vicinity of Portland,

Rideau Ferry and Sand Island);

Beverly, Charleston, Crosby, Otter, Sand and Wolf Lakes.

(b) In Lanark County:

Tay River, Otty, and Pike Lakes.

(c) In Frontenac County:

Crow and Bob's Lakes.

The total number of ling removed from these waters was 12,315. The average weight of the ling taken was four pounds; therefore, the total amount of ling removed was in the neighbourhood of twenty-five tons.

FISH PLANTING SURVEYS

The following fish planting surveys were carried out during the year:

WATERS	COUNTY	TOWNSHIP
Almond Creek	Elgin	Bayham
Earnshaw Creek	Elgin	Southwold
Ferguson's Pond (on Earnshaw Cr.)	Elgin	Southwold
Grange Hall Creek	Elgin	Malahide
Little Otter Creek	Elgin	Bayham
Mitchell or Lanner Stream	Norfolk	Houghton
	Elgin	Bayham
Crawford Lake	Halton	Nassagaweya
Wye Creek	Middlesex	Nissouri W.
Echo Lake	Muskoka	McLean
Sparrow Lake	Muskoka	Morrison
	Simcoe	Matchedash, Orillia
Eckert or Manery's Creek	Norfolk	Middleton
Leach Creek	Norfolk	Houghton
Unnamed Creek (near Courtland)	Norfolk	Middleton
Five Point Stream	Oxford	Oxford W.
Hodges Mill Pond	Oxford	Oxford E.
McCabe's Creek	Oxford	Norwich S.
Tottle Lake	Oxford	Blenheim
Deer River	Peterborough	Harvey, Burleigh
Eels Creek	Peterborough	Burleigh, Anstruther
Mississauga River	Peterborough	Harvey
Mary Lake	York	King
Old Holland River	York	Gwillimbury E.
Pond at Richmond Hill	York	Vaughan

ACKNOWLEDGMENTS

In conclusion I desire to give expression to my appreciation of the valuable assistance and co-operation received by the Department from many sources during the year.

Our work which at times is unquestionably somewhat difficult has been made the more pleasant and enjoyable by reason of the continued co-operation of interested individuals and the various Fish and Game Protective Associations throughout the Province. My contacts with officers and members of many of these organizations encourages a thought that the work of these Associations has become so well known and their usefulness so apparent that there is no question as to the place they occupy in the sphere of game and fish conservation.

An obvious result of the gathering together of any group or organization of men to discuss measures for the benefit of all, will be a spread of knowledge resulting in a more enlightened type of citizen, and incidentally a better community to live in. A Sportsmen's Organization accomplishes these things, and, while it is concerned with the conservation of fish and game throughout the Province, it is

primarily interested in seeing that everything possible is done to ensure satisfactory local conditions.

We believe that the work of the Protective Associations throughout the Province is of very great value, and are therefore anxious to encourage the organization and development of these associations wherever possible. The fact of membership in a Fish and Game Protective Association implies good sportsmanship, and good sportsmanship is the key to a liberal enjoyment of those healthful pleasures which are our heritage.

Mention is also made of the fact that generally speaking, members of the staff, both the inside and the outside service, have conducted themselves and performed the duties assigned to them in the best interests of the Department and its varied activities.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

Toronto 2, March 9th, 1938.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937

LARGE-MOUTHED BLACK BASS

FRY	
Bruce:	
Agar Lake	15,000
Arran Lake	10,000

Grey:	
McNab Lake	20,000

FINGERLINGS

Lanark:	
Clayton Lake	1,000

Leeds:	
Bass Lake	1,000
Gananoque Lake	138*
Lower Beverley Lake	2,000
Sand Lake	1,200
Whitefish Lake	1,000

Norfolk:	
Little Lake	560

Parry Sound:	
Manitowaba Lake	500

Peterborough:	
Rice Lake	1,000

* Adults

SMALL-MOUTHED BLACK BASS

FRY

Bruce:	
Britain Lake	5,000
Cameron Lake	10,000
Chesley Lake	15,000
Cyprus Lake	10,000
Gould Lake	15,000
Isaac Lake	15,000
Miller Lake	10,000
Sauble River	45,000
Saugeen River	30,000
Shouldice Lake	10,000
Silver Lake	10,000

Frontenac:	
Bass Lake	5,000
Big Clear Lake	5,000
Bobs Lake	10,000
Bull Lake	5,000
Cross Lake	5,000
Crotch Lake	10,000
Crow Lake	5,000
Eagle Lake	5,000
Kashwakamak Lake	5,000
Long Lake (Hinchin- brooke)	5,000
Horseshoe Lake	5,000
Marble Lake	5,000
Mississagagon Lake	5,000
Rock Lake	5,000

Sharbot Lake	10,000
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Grey:	
Francis Lake	5,000
Wilcox Lake	7,500

Haldimand:	
Grand River	25,000

Haliburton:	
Paudash Lake	10,000

Hastings:	
Baptiste Lake	5,000
Bass Lake	5,000
Crow Lake and river	5,000
Gunter Lake	5,000
Little Salmon Lake	5,000
Moir Lake	5,000
Moir River	10,000
Oak Hill Lake	5,000
Pine Lake	5,000
Stoco Lake	10,000
Wadsworth Lake	5,000
West Lake	5,000

Huron:	
Bluevale River	15,000

Lanark:	
Fagan's Lake	5,000
Otty Lake	5,000

Leeds:	
Big Rideau Lake	5,000
Charleston Lake	10,000
Crosby Lake	5,000
Otter Lake	5,000
Sand Lake	5,000
Wolfe Lake	5,000

Lennox-Addington:	
Beaver Lake	5,000
Varty Lake	5,000

Muskoka:	
Bass Lake	10,000
Buck Lake	10,000
Dickie Lake	10,000
Duck Lake	10,000
Henshaw Lake	10,000
Lake Rosseau	40,000
MacKay's Lake	15,000
Pine Lake	15,000
Riley Lake	10,000
Silver Lake	10,000
Sucker Lake	10,000
Three Mile Lake	20,000

Northumberland:	
Crow Bay	5,000
Trent River	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937—Continued

SMALL-MOUTHED BLACK BASS
—Continued

Parry Sound:		Loon Lake	1,000
Bass Lake	10,000	Kent:	
		Rondeau Bay	350
Peterborough:		Lanark:	
Belmont Lake	2,500	Bartram Lake	1,000
Buckhorn Lake	5,000	Christie Lake	500
Clear Lake	5,000	Dalhousie Lake	1,000
Deer Lake	5,000	Long Lake	1,000
Little Cedar Lake	5,000	Mississippi Lake	1,000
Loon Lake	10,000	Mississippi River	1,000
Otonabee River	5,000	Pike Lake	500
Pigeon Lake	5,000	Leeds:	
Quarry Lake	5,000	Benson Lake	1,000
Rice Lake	5,000	Crow Lake	1,000
Round Lake	5,000	Gananoque Lake	1,000
Sandy Lake	5,000	Newborough Lake	1,000
Prince Edward:		Troy Lake	1,000
Consecon Lake	5,000	Whitefish Lake	1,000
Roblin's Lake	5,000	Lennox-Addington:	
Stormont:		Long Lake	1,000
St. Lawrence River.....	5,000	South Beaver Lake.....	1,000
		White Lake	1,000
Victoria:		MUSKOKA:	
Sturgeon Lake	5,000	Lake Joseph	1,000
Waterloo:		Lake Stewart	1,000
Conestoga River	25,000	Little Sand Lake	500
Grand River	25,000	Long Lake	1,000
		Muskoka Lake	1,000
		Nine Mile Lake	1,000

FINGERLINGS

Carleton:		Norfolk:	
Ottawa River	1,000	Nanticoke Creek	500
Frontenac:		Parry Sound:	
Bear Lake	1,000	Ahmic Lake	500
Canonto Lake	1,000	Beaver Lake	500
Chippego Lake	1,000	Bella Lake	500
Crotch Lake	1,000	Bells Lake	500
Desert Lake	1,000	Bilson Lake	500
Draper Lake	1,000	Blackburn Lake	500
Long Lake (Clarendon) ..	1,000	Cecebe Lake	500
Long Lake (Portland) ..	1,000	Clear Lake	1,000
Loughborough Lake	1,000	Cummings Lake	500
Lucky Lake	1,000	Darlington Lake	500
Mazinaw Lake	1,000	Deer Lake (Lount)	1,000
Pine Lake	1,000	Devolve Lake	1,000
Schooner Lake	1,000	Doe Lake	500
Silver Lake	1,000	Head of Lake Joseph.....	1,000
Spectacle Lake	1,000	Lake of Many Islands.....	500
Sydenham Lake	500	Little Clam Lake.....	500
Thirteen Island Lake.....	1,000	Little Deer Lake.....	500
Thirty Island Lake.....	1,000	Magnetawan River	500
White Lake	1,030	Manitowaba Lake	500
Halton:		Maple Lake	1,000
Bronte Creek	1,000	Mary Jane Lake	500
Oakville Creek	1,000	McGowan Lake	500
Hastings:		Neighick Lake	500
Bow Lake	1,000	Pickerel Lake	1,000
		Portage Lake	1,000
		Plumtree Lake	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

SMALL-MOUTHED BLACK BASS
 —Continued

Parry Sound—Cont.	
Rainy Lake	500
Rankin's Lake	500
Sequin River	500
Shawanaga Lake	500
Shebeshekong Lake	500
Turtle Lake	1,000
Whitefish Lake	1,000
Whitestone Lake	500

Renfrew:	
Moccasin Lake	1,000
White Lake	1,000

Russell:	
Castor River	500

ADULTS

Haliburton:	
Beach Lake	300
Black Lake	300
Brady Lake	300
Davis Lake	300
Grace Lake	600
Gull Lake	300
Hurricane Lake	300
Kashagawigamog Lake ..	300
Saskatchewan Lake	300
Soyer Lake	300

Kenora:	
Long Lake	43

Kent:	
Rondeau Bay	160

Leeds:	
Beverley Lake	115
Gananoque Lake	100

Lennox and Addington:	
Weslemkoon Lake	114

Muskoka:	
Deep Bay (Sparrow Lake) ..	150

Rainy River:	
Clearwater Lake	240
Jackfish Lake	25
One-sided Lake	200
Pipestone Lake	25

Sudbury:	
French River	30

Victoria:	
Pigeon Lake	300
Sturgeon Lake	300

Wellington:	
Reformatory Pond	100

NOTE: All adult bass were harvested from natural waters in the areas or districts specified, excepting the last item.

MASKINONGE

FRY

Hastings:	
Crow River	10,000

Northumberland:	
Crow Bay	5,000
Rice Lake	30,000
Trent River	27,000

Peterborough:	
Buckhorn Lake	5,000
Chemong Lake	20,000
Clear Lake	5,000
Deer Bay	10,000
Katchawanooka Lake	10,000
Lovesick Lake	10,000
Otonabee River	5,000
Pigeon Lake	25,000
Trent River	10,000

Prince Edward:	
Muscote Bay	12,000

Simcoe:	
Holland River	25,000

Victoria:	
Balsam Lake	30,000
Pigeon River	30,000
Sturgeon Lake	5,000

PERCH

Essex:	
Lake Erie	46,080,000

PICKEREL

Algoma:	
Alma Lake	200,000
Bright Lake	500,000
Clear Lake	250,000
Cummings Lake	500,000
Desbarats Lake	500,000
Echo Lake	410,000
Gordon Lake	500,000
Little Bass Lake	500,000
Little Clear Lake	250,000
Long Lake	1,000,000
Mississauga Lake	1,000,000
Rock Lake	500,000

Brant:	
Grand River	500,000

Bruce:	
Chesley Lake	100,000
Isaac Lake	500,000
Saugeen River	1,500,000
Silver Lake	200,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

PICKEREL—Continued

Carleton:		Eagle Lake	2,500,000
Ottawa River	400,000	Granite Lake	100,000
Rideau River	300,000	Lake of the Woods	18,200,000
Cochrane:		Long Pine Lake	200,000
Barber's Bay	250,000	Lulu Lake	1,000,000
Mortimer Lake	250,000	Marchington Lake	2,000,000
Reid Lake	250,000	Stanzikihimi Lake	2,000,000
Remi Lake	500,000	Wabigoon Lake	500,000
Wilson Lake	250,000	Lanark:	
Frontenac:		Bennet's Lake	300,000
Big Clear Lake	250,000	Big Rideau Lake	1,300,000
Bobs Lake	500,000	Black Lake	200,000
Bull Lake	250,000	Christies Lake	200,000
Clear Lake	100,000	Dalhousie Lake	700,000
Crow Lake	200,000	Joe's Lake	100,000
Devil Lake	100,000	Lower Rideau	1,500,000
Fourteen Island Lake	300,000	Mississippi Lake	300,000
Green Lake	100,000	Mississippi River	500,000
Gull Lake	500,000	Patterson's Lake	200,000
Horseshoe Lake	100,000	Rideau River	500,000
Kashwakamak Lake	500,000	Leeds:	
Lake Chippego	200,000	Bass Lake	500,000
(Little) Mississagagon		Crosby Lake	200,000
Lake	200,000	Higley Lake	500,000
Long Lake (Hinchin-		Opinicon Lake	400,000
brooke)	200,000	Sand Lake	100,000
Long Lake (Portland)	500,000	West Rideau Lake	500,000
Malcolm Lake	100,000	Lennox and Addington:	
Marble Lake	200,000	Bass Lake	100,000
Mississagagon Lake	200,000	Long Lake	400,000
Mississippi River	500,000	Napanee River	250,000
Rock Lake	300,000	South Beaver Lake	250,000
Salmon River	100,000	White Lake	400,000
Sand Lake	500,000	Manitoulin:	
Sharbot Lake	700,000	Kagawong Lake	2,000,000
Silver Lake	100,000	Lake Mindemoya	1,000,000
Grenville:		Muskoka:	
Nation River	100,000	Allan's Lake	100,000
Grey:		Bins Lake	100,000
Mountain Lake	100,000	Henshaw Lake	100,000
Haliburton:		Kahshe Lake	250,000
Paudash Lake	400,000	Lake Muskoka	1,000,000
Hastings:		Lake Rosseau	1,400,000
Fraser Lake	200,000	Long Lake	100,000
Moir Lake	300,000	Longford Lake, South	400,000
Moir River	200,000	Moates Lake	100,000
Soyers Lake	200,000	Silver Lake	100,000
Stoco Lake	300,000	Six Mile Lake	500,000
York River	200,000	Sparrow Lake	2,000,000
Huron:		(eggs)	
Fordwich Mill Pond	200,000	Spence Lake	100,000
Kenora:		Spring Lake	50,000
Berry Lake	100,000	Sucker Lake	100,000
Big Vermilion Lake	2,500,000	Three Mile Lake	200,000
Dogtooth Lake	150,000	Nipissing:	
		Bruce Lake	100,000
		Cache Lake	150,000
		Champlain Lake	500,000
		Finlayson Lake	100,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937—Continued

PICKEREL—Continued**Nipissing—Continued**

Jumping Caribou Lake ...	200,000
Lake Nosbonsing	500,000
Lake Talon	250,000
Lake Timagami	1,700,000
Martin Lake	300,000
McPhee Lake	100,000
Red Cedar Lake	300,000
Tilden Lake	100,000
Wasing Lake	300,000
Wickstead Lake	300,000
Wilson Lake	100,000

Northumberland:

Crow Bay	250,000
Mud Lake	250,000
Presqu'île Bay	500,000
Rice Lake	1,200,000
Trent River	1,000,000

Oxford:

Lake Lisgar	500,000
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Parry Sound:

Ahmie Lake	1,000,000
Axe Lake	200,000
Barton Lake	100,000
Beaver Lake	100,000
Commanda Lake	200,000
Dobbs Lake	100,000
Doe Lake	300,000
Isabella Lake	200,000
Head of Lake Joseph	500,000
Lake Cecebe	200,000
Lake of Many Islands	250,000
Little Deer Lake	250,000
Magnetawan River	250,000
McQuaby's Lake	100,000
Osler's Lake	400,000
Otter Lake	400,000
Pickereel Lake	100,000
Portage Lake	250,000
Restoule Lake	200,000
Sand Lake	100,000
Sequin River	200,000
Shawanaga Lake	250,000
Shebeshekong Lake	100,000
Squaw Lake	200,000
Stanley Lake	100,000
Stormy Lake	100,000
Sucker Lake	250,000
Wah-Wash-Kesh Lake	300,000
Whitstone Lake	200,000
Wolf Lake	100,000
Wolf River	300,000
Wilson Lake	100,000

Peterborough:

Indian River	250,000
Otonabee River and Little Lake	1,200,000
Quarry Lake	410,000
Rice Lake and Trent River	250,000

Prince Edward:

Bay of Quinte	10,502,000
Consecon Lake	500,000
East Lake	500,000

Rainy River:

Beaverhouse Lake	1,000,000
Clearwater Lake	2,000,000
Off Lake	1,000,000
Quill Lake	2,000,000
Rainy Lake	77,000,000
Windigo Lake	1,000,000

Renfrew:

Blackfish Lake	200,000
Chats Lake	1,000,000
Golden Lake	1,000,000
Madawaska River	1,000,000
Norway Lake	300,000
Ottawa River	200,000
Petawawa River	900,000
Sturgeon Lake	600,000

Russell:

Castor River	100,000
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Simcoe:

Gloucester Pool	2,500,000
Lake Couchicing	4,000,000
Little Lake	400,000
Matchedash Bay	2,000,000
Nottawasaga River	500,000
Severn River	500,000

Stormont:

Nation River	100,000
St. Lawrence River	2,037,500

Sudbury:

Bear Lake	500,000
Birch Lake	250,000
Lake Penage	3,000,000
Matagamasi Lake	250,000
Onaping Lake	1,000,000
Ox Lake	1,000,000
Ramsay Lake	1,000,000
Trout Lake	250,000
Unnamed Lake	200,000
Wanapitei Lake	1,000,000

Thunder Bay:

Baril Lake	100,000
Cordingley Lake	250,000
Lake of the Flats	100,000
Lake Shebandowan	200,000

Timiskaming:

Hound Chutes	100,000
Lake Timiskaming	500,000
Montreal River	200,000
Net Lake	100,000
Rib Lake	100,000
Round Lake	100,000
Sesekinika Lake	800,000
Trout Lake	100,000
Twin Lake	100,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1936, to March 31st, 1937—Continued

PICKEREL—Continued

Victoria:

Lake Dalrymple	500,000
Mud Turtle Lake	100,000
Round Lake	500,000
Young's Lake	200,000

Great Lakes:

Lake Huron	64,500,000
Georgian Bay	2,000,000
North Channel	4,300,000
Lake Superior	20,150,000

NOTE: Planting for Lake Ontario listed under Bay of Quinte (Prince Edward County)

BROWN TROUT**FINGERLINGS**

Brant:

Whiteman's Creek	5,000
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Bruce:

Cameron Lake	5,000
Crane Lake	5,000
Crane River	5,000
Cyprus Lake	5,000
Saugeen River	10,000
Vogt's Creek	5,000

Carleton:

Mississippi River	2,000
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Durham:

Baxter's Creek	1,500
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Elgin:

Little Otter River	5,000
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Grey:

Big Head River	10,000
Creamery Creek	2,000
Harrison Park Creek	5,000
Potawatami River	12,000
Saugeen River	15,000
Styx River	5,000
Sydenham River	5,000
Weatherspoon Creek	3,000

Haldimand:

Grand River	5,000
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Halton:

N. Branch Sixteen Mile Creek	7,000
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Manitoulin:

River Manitou	10,000
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Norfolk:

Nanticoke Creek	1,000
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Peterborough:

Deer Bay Creek	1,500
Dickson's Creek	1,500
Eel's Creek	1,000
Jack's Creek	1,500
Mississauga River	1,500
Nogies Creek	1,500

Simcoe:

Nottawasaga River	10,000
Demonstration purposes	50

YEARLINGS

Brant:

Whiteman's Creek	1,000
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Elgin:

Little Otter River	1,000
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Grey:

Beaver River (lower reaches)	1,120
Big Head River	1,125

Simcoe:

Nottawasaga River	3,000
Demonstration purposes	45

LAKE TROUT**FRY**

Frontenac:

Big Gull Lake	50,000
Buckshot Lake	4,000
Camp Lake	4,000
Canonto Lake	4,000
Crow Lake	15,000
Devil Lake	20,000
Draper Lake	10,000
Long Lake	25,000
Mackie Lake	4,000
Mississagagon Lake	4,000
Palmerston Lake	4,000
Rock Lake	4,000
Thirty Island Lake	55,000

Leeds:

Big Rideau	25,000
Charleston Lake	45,000
Indian Lake	10,000
Otter Lake	15,000
Red Horse Lake	30,000

Lennox-Addington:

Mazinaw Lake	25,000
Otter Lake	10,000
Silver Lake	10,000
White Lake	5,000

Great Lakes:

Lake Ontario	1,187,000
Lake Huron and North Channel	100,000
Lake Superior	2,500,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

Lake Trout—Continued**EYED EGGS**

Exchange	3,200,000
Demonstration purposes	9,400

FINGERLINGS**Algoma:**

Achigan Lake	20,000
Basswood Lake	25,000
Big Bear Lake	15,000
Chiblow Lake	50,000
Clear Lake (188)	70,000
Cumming Lake	10,000
Deep Lake	10,000
Grey Trout Lake	10,000
Hawk Lake	10,000
Hobon Lake	15,000
Jobammeghia Lake	15,000
Lake Matinenda	25,000
Lake Tendinenda	25,000
Lake of the Mountains	10,000
Lonely Lake	10,000
Loon Lake	10,000
Moose Lake	25,000
McCarroll's Lake	10,000
Patten Lake	25,000
Pickernel Lake	10,000
Rainbow Lake	15,000
Raw Hide Lake	30,000
Red Deer Lake	10,000
Sand Lake	25,000
Stuart Lake	25,000
Trout Lake (Aweres)	10,000
Trout Lake (24-R-12)	10,000
Upper Island Lake	10,000
Weckstrom's Lake	5,000

Bruce:

Gillies Lake	27,000
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Cochrane:

Chapman Lake	10,000
Nellies Lake	10,000
Perry Lake	10,000

Frontenac:

Canonto Lake	4,000
Crotch Lake	4,000
Eagle Lake	4,000
Green Lake	5,000
Grindstone Lake	4,000
Sharbot Lake	4,000

Haliburton:

Bear Lake (Glamorgan) ..	5,000
Bear Lake (Livingstone) ..	4,000
Beech Lake	5,000
Big Boskung Lake	10,000
Bow Lake	5,000
Clearwater Lake	4,000
Davis Lake	5,000
Drag Lake	10,000
Eagle Lake	5,000

East Lake	4,000
Fletcher Lake	4,000
Gull Lake	15,000
Haliburton Lake	15,000
Hall's Lake	10,000
Hawke Lake	4,000
Hollow Lake	8,000
Horseshoe Lake	5,000
Kashawgamog Lake	10,000
Kimball Lake	4,000
Kushog Lake	10,000
Little Boskung Lake	10,000
Little Hawke Lake	10,000
Maple Lake	5,000
Moose Lake	5,000
Mountain Lake	10,000
McFadden Lake	4,000
Oblong Lake	5,000
Otter Lake	10,000
Paudash Lake	4,000
Pine Lake	5,000
Redstone Lake	10,000
South Bay	5,000
Spruce Lake	4,000
Stormy Lake	5,000
St. Norah's Lake	4,000
Twelve Mile Lake	10,000
White Trout Lake	4,000
Wolf Lake	5,000

Hastings:

Baptiste Lake	80,000
Bass Lake	4,000
Bay Lake	4,000
Big Egan Lake	4,000
Big Salmon Lake	4,000
Clear Lake (Herschel) ...	60,000
Clear Lake (Lake)	4,000
Eagle Lake	4,000
Jamieson Lake	4,000
Kaministeg Lake	25,000
Limestone Lake	2,000
Little Salmon Lake	4,000
Lavelle Lake	4,000
Long Lake (Mayo)	6,000
Quinlan Lake	2,000
Robinson Lake	2,000
Trout Lake (Herschel) ..	60,000
Weslemkoon Lake	4,000

Kenora:

Armstrong Lake	50,000
Big Stone Lake	6,000
Big Vermilion Lake	110,000
Clearwater Bay	125,000
Cul de Sac Lake	50,000
Dogtooth Lake	50,000
Eagle Lake	50,000
Granite Lake	50,000
Silver Lake	50,000
Trout Lake	50,000
Whitefish Bay	75,000

Lanark:

Lower Rideau	30,000
Silver Lake	30,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937—Continued

Lake Trout—Continued

Manitoulin:

Kagawong Lake	25,000
Manitou Lake	25,000

Muskoka:

Bass Lake	4,000
Bella Lake	4,000
Benson's Lake	4,000
Big Twin Lake	4,000
Britannia Bay	4,000
Bruce's Lake	4,000
Clear Lake (McLean)....	4,000
Clear Lake (Ridout)....	4,000
Clear Lake (Sinclair)....	4,000
Fairy Lake	8,000
Fox Lake	4,000
Haystack Bay	4,000
Lake of Bays	16,000
Lake Joseph	16,000
Lake Muskoka	18,000
Lake Rosseau	24,000
Little Clear Lake	4,000
Little Twin Lake	4,000
Long Lake	4,000
Loon Lake	4,000
Mary's Lake	4,000
McCrea's Lake	4,000
Peninsula Lake	8,000
Portage Bay and Narrows	4,000
Poverty Lake	4,000
Rebecca Lake	4,000
St. Mary's Lake	4,000
Skeleton Lake	16,000
Sucker Lake	4,000
Ten Mile Lake	4,000
Trout Lake	4,000
Vernon Lake	8,000
Waseosa Lake	4,000

Nipissing:

Buck Lake	5,000
Cameron Lake	10,000
Canoe Lake	8,000
Cross Lake	10,000
Dotty's Lake	4,000
Jumping Caribou Lake ..	15,000
Lake Timagami	50,000
Martin Lake	15,000
Moore's Lake	10,000
Oxbow Lake	4,000
Red Cedar Lake	15,000
Round Lake	4,000
Smoke Lake	8,000
South Tea Lake	8,000
Sturgeon Lake	10,000
Trout Lake	45,000
Turtle Lake	15,000
Two Rivers Lake	10,000
Whitney Lake	10,000
Wilson Lake	15,000

Parry Sound:

Bay Lake	4,000
Clear Lake (Perry)	4,000

Clear Lake (Humphry) ..	4,000
Eagle Lake	8,000
Eleanor Lake	4,000
Foley Lake	4,000
Head of Lake Joseph....	4,000
Horn Lake	8,000
Lorimer Lake	8,000
Otter Lake	8,000
Portage Lake	4,000
Sand Lake	8,000
Star Lake	4,000
Three Legged Lake	8,000
Trout Lake	4,000
Whitefish Lake	4,000

Renfrew:

Bark Lake	25,000
Barry's Bay	10,000
Blackfish Bay	10,000
Carson Lake	10,000
Condon Lake	10,000
Diamond Lake	10,000
Greenan's Lake	5,000
Lake Clear	25,000
Long Lake	25,000
Lower Carson Lake....	10,000
Pog Lake	15,000
Round Lake	10,000
Trout Lake (Griffith) ..	15,000
Trout Lake (Sherwood)..	10,000
Wadsworth's Lake	20,000

Simcoe:

Lake Simcoe	34,000
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Sudbury:

Bell Lake	50,000
Ella Lake	10,000
Lake Penage	25,000
Long Lake	10,000
Loon Lake	25,000
Ramsay Lake	10,000
Trout Lake	15,000
Wanapitei Lake	25,000
Weiquid Lake	25,000
Windy Lake	25,000

Thunder Bay:

Baril Lake	50,000
Brown Lake	25,000
Jarvis Bay	100,000
Lac Des Mille Lacs....	50,000
McKenzie Lake	50,000
Surprise Lake	20,000
Twin Lakes	75,000
Wawon Lake	25,000

Timiskaming:

Larder Lake	25,000
Net Lake	10,000
Rib Lake	15,000
Twin Lake	15,000
Trout Lake	15,000
Watabeag Lake	15,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937—Continued

Lake Trout—Continued

Victoria:	
Birch Bark Lake	5,000
Great Lakes:	
Georgian Bay	4,509,000
Lake Huron and North Channel	6,470,000
Lake Superior	3,765,000
Lake Ontario	45,244

RAINBOW TROUT**FINGERLINGS**

Algoma:	
Chippewa River	2,000
Bruce:	
Teeswater River	10,000
Dufferin:	
Lower Nottawasaga River	10,000
Elgin:	
St. Thomas Reservoir	2,000
Grey:	
Sheppard's Lake	17,000
Sydenham River	30,000
Norfolk:	
Black Creek	10,000
Lynn River	5,000
North Creek	4,000
Young's Creek	5,000
Simcoe:	
Brough's Creek	5,000
Sudbury:	
Emery Creek	5,000
Sauble River	2,000
York:	
Humber River	20,000
Sales	6,000

YEARLINGS

Grey:	
Sydenham River	501*
Simcoe:	
Brough's Creek	1,740
York:	
Humber River	238
Demonstration purposes and sale	1,028**
* Surplus adults....	96
** Surplus adults....	93

SPECKLED TROUT**FRY**

Hastings:	
Fraser Creek	25,000
Squire's Creek	25,000
Northumberland:	
Black's Creek	25,000
Dawson Creek	40,000
Heffernan's Creek	25,000
Pegman's Creek	25,000
Parry Sound:	
Howard Stream	7,000
Prince Edward:	
Warings Creek	10,000

EYED EGGS

Thunder Bay:	
Bear Lake	2,000
Clegg Lake	5,000
Fork Lake	2,000
Hilma Lake	5,000
Himdick Lake	2,000
Moose Lake	5,000
Pine Lake	2,000
Sand Beach Lake	2,000
Demonstration purposes	3,600

FINGERLINGS

Algoma:	
Arnill Lake	5,000
Bellevue Creek	5,000
Boundary Lake	1,500
Burnt Island Lake	15,000
Centre Lake	1,500
Franklin Lake	1,500
Havilah Lake	1,500
McKinnon's Creek	1,500
Pine Lake (25-R-11)	5,000
Tookenay Lake	15,000
Trout Lake Inlet	1,000
Bruce:	
Big Bay Swamp Creek ...	2,000
Colpoy's Creek	2,000
Dickie's Creek	5,000
Foster Moffatt Creek ...	5,000
Judge's Creek	10,000
Sharp's Creek	2,000
Sparrow Creek	1,000
Spring Creek (Carrick) ..	5,000
Cochrane:	
Charlebois Lake	1,000
Croft's Creek	1,000
Dalton Lake	1,000
Dandurand Creek	1,000
Fuller's Creek	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

SPECKLED TROUT—Continued**Cochrane—Continued**

Grassy River	1,000
Halfway Lake	1,000
Hooker Creek	1,000
Lake of Bays	1,000
Legare Creek	1,000
McIntyre Lake	1,000
Metagami River	1,000
Munro Lake	1,000
Ramsbottom Creek	1,000
Red Sucker Creek	1,000
Rowley Lake	1,000
Waterhen Creek	1,000

Dufferin:

Cemetery Creek	6,000
Credit River	6,000
Nottawasaga River	7,000
Pine River	8,000

Durham:

Bert Reid Creek	1,000
Brown's Creek	1,000
Carl Billings Creek	1,000
Cedar Springs	1,000
Cedar Spring Creek	1,000
Cowper's Creek	1,000
DeLong's Stream	500
Hale's Creek	1,000
Luxon's Creek	2,000
Mercer's Creek	1,000
Millson Creek	1,000
Moffatt's Creek	1,000
Patton's Stream	1,000
Rowe's Stream	500
Sowden's Stream	1,000
Sowper's Creek	1,000
Spring Creek	1,000
Thompson's Creek	1,000

Elgin:

Ball Creek	10,000
Venison Creek	10,000

Frontenac:

Grindstone Lake	5,000
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Grey:

Beatty River	6,000
Camp Creek	7,500
Deer Creek	6,000
Fairbairn's Creek	5,000
Firth's Creek	5,000
Gravel Pit Creek	5,000
McCartney's Lake	3,000
Mountain Creek	2,000
Mitchell's Creek	1,000
Noble Creek	5,000
Rob Roy Creek	10,000
Tributaries Camp Creek ..	12,500
Tributaries Rocky Saugeen	5,000
Tributaries Big Head River	5,000

Haliburton:

Cardiff Lake	2,500
Cross Lake	10,000
Farquhar Lake	2,500
Otta Creek	5,000
Otter Lake	15,000
Round Lake	5,000
Slipper Lake	5,000

Halton:

Black Creek	8,000
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Hastings:

Crooked Lake	10,000
Green's Lake	10,000
Little Mississippi River...	5,000
Rawdon Creek	12,000
Trout Creek	5,000

Huron:

Blyth Creek	7,000
Porter's Creek	7,000
St. Helen's Creek	1,000

Lanark:

Clyde River	7,000
Jerry's Creek	3,000

Leeds:

Willies Brook	1,000
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Lennox-Addington:

Smiths Lake	5,000
White Lake	10,000

Manitoulin:

Blue Jay Creek	10,000
Hare's Creek	1,000

Muskoka:

Axe Creek	7,000
Fairy Lake	7,000
Gipsy Bells Creek	5,000
Helve Creek	8,000
Lake Waseosa	8,000
Loon Lake	3,000
Menominee Lake	10,000
Spring Creek (Sinclair) ..	2,000
Streams-Rat Lake and	
Lake of Bays	1,000

Nipissing:

Brule Creek	2,000
Crooked Lake	3,500
McMaster Lake	3,000
Smoky Creek	4,000
Timagami Lake	3,400
Whitney Lake	1,000

Norfolk:

Nanticoke Creek	8,000
Spooky Hollow Stream ..	750

Northumberland:

Callahan's Creek	3,000
DeLong's Creek	500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

SPECKLED TROUT—Continued**Northumberland—Continued**

Goodrich Creek	15,000
Taylor's Creek	1,000
Valleau Creek	1,000

Oxford:

Manuel Creek	1,000
Sutherland Pond	2,000
Whiting Creek	3,000

Parry Sound:

Boyne River	10,000
Howard Stream	1,000
Sequin River	5,000

Peel:

Kress Stream	14,000
Stream—East Garafraxa..	1,000

Renfrew:

Bass Lake	4,000
Black Donald Creek	10,000
Brennan's Creek	4,000
Egan's Lake	10,000
Grant Lake	4,500
Gun Lake	3,000
Gunning Lake	2,000
Heeney's Creek	4,500
Jack's Creek	10,000
Johnson Lake	10,000
Nadeau Creek	10,000
Reserve Lake	10,000
Round Lake	10,000
Trout Lake	10,000
Twin Lakes	10,000
Wylie Creek	10,000

Sudbury:

Anderson Lake	1,000
Johns Creek	7,000
Karl Creek	1,000
McLeod's Creek	5,000
Shenango Creek	1,500
Waddell Lake	1,500

Thunder Bay:

Arnold Creek	5,000
Bender Lake	1,200
Binaback Lake	1,500
Bruce Lake	3,000
Bruley Creek	5,000
Canyon Lake	2,000
Caribou Island Lake.....	3,000
Cedar Creek	15,000
Center Lake	2,000
Clegg Lake	2,500
Coldwater River	25,000
Deception Lake	15,000
Dixon Lake	3,000
Fork Lake	2,000
Gold Lake	1,500
Grand Lake	2,000
Grange Lake	2,500
Ham Lake	1,000
Hilmar Lake	2,000

Himdick Lake	3,000
Hymers Lake	2,500
Johnston Lake	2,500
Kowkash River	15,000
Loon Creek	2,000
Mackintosh Lakes	20,000
McIntyre River	25,000
Neebing River	15,000
Pass Lake	5,000
Pearl River	25,000
Pitch Creek	10,000
Rainbow Lake	2,000
Sandy Beach Lake	2,000
Silver Lake	15,000
Spring Lake	5,000
Squaw Lake	3,000
Sunset Lake	2,000
Upper Pass Lake	5,000
Whitewood Creek	5,000
Wideman Lake	5,000
Wigan Lake	4,600
Wigwam Lake	3,500

Timiskaming:

Crystal Lake	2,000
Fairy Lake	3,000
Jean Baptiste Lake.....	2,000
Latour Creek	3,000
Loon Creek	1,000
Maiden Creek	1,000
Moffatt Creek	3,000
Moloney Creek	1,000
Pike Creek	2,000
Small Spot Creek	1,000
Spring Creek	2,000
Sesekinika Creek	2,000
Trout Creek	1,600
Wabi Creek	2,000
Watabeag River	2,000

Waterloo:

Elora Stream	5,000
Erbville Creek	7,000
Groves Creek	1,000
Idyle Wild Stream	5,000
Mannheim Stream	7,000

Welland:

Effingham Stream	9,000
Sulphur Springs	9,000

Wellington:

Beley's Creek	2,000
Bell's Creek	10,000
Bradley Creek	5,000
Erin Mill Pond	6,000
Osprunge Creek	2,500
Saugeen River	6,000
Speed River	5,000

Sales

3,000

YEARLINGS**Algoma:**

Achigan Creek	3,000
Achigan Lake	2,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

SPECKLED TROUT—Continued**Algoma—Continued**

Agawa River	4,000
Alva Lake	1,000
Anjigami Creek	2,000
Basswood Lake	1,500
Batchewana River	4,000
Bull Creek	500
Burrough's Lake	500
Caldwell's Lake	500
Camp 8 Creek	1,000
Caribou Lake	3,000
Chippewa River	4,000
Clear Lake Creek	1,000
Clearwater Creek	2,000
Driving Creek	3,000
East Twin Lake	500
Garden River	3,000
Goulais River	3,000
Gravel River	500
Hawk Lake	1,000
Hoath Lake	3,000
Hobon Lake	2,000
Hubert Lake	2,000
Jobammeghia Lake	2,000
Lafoe Creek	500
Long Lake	500
Loon Lake Creek	200
Loon Lake (Deroche)	3,000
Loon Lake (Kirkwood)....	300
Loon Lake (24-R-13)....	2,000
Loonskin Lake	2,000
Lower Island Lake	3,000
McCormick Lake	1,000
McVeigh Lake	1,000
Mashagami Lake	4,000
Michipicoten River	4,000
Mile 58 Lake	1,000
Mississauga River	5,000
Mongoose Lake	2,000
Moose Lake	2,000
Mountain Lake	3,000
Osborne Creek	500
Patten Lake	3,000
Pine Lake (24-R-13)....	1,000
Pine Lake (25-R-11)....	1,000
Pinkney Lake	1,000
Rapid River	1,000
Root River	3,000
Sand Lake Creek	2,000
Sand River	1,000
Sharp Sand River	1,500
Silver Creek	3,000
Snowshoe Creek	2,000
Speckled Trout Lake	3,000
Spruce Lake	2,000
Tamarack Lake	500
Tawabinasay Lake	2,000
Tea Lake	2,000
Tendinenda Lake	1,000
Thessalon (Little) River..	1,000
Triple Lake	500
Trout Lake (62)	2,000
Trout Lake (Aweres)	3,000

Twin Lake	4,000
Upper Island Lake	3,000
Wa Wa Lake	2,000
Walker Lake	1,500
Wallace Lake	500
Wartz Lake	2,000
Weckstrom's Lake	1,500
West Twin Lake	500

Bruce:

Spring Creek (Amabel) ..	1,000
Stoney Creek	1,000
Willow Creek	1,000

Dufferin:

Huxtable Creek	1,000
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Durham:

Best Pond	250
Burk's Pond	500
Cavan Stream	3,000
Elizabethville Creek	1,000
Jamieson Pond	250
Leskard Creek	700
North Orono Stream	300
Park Stream	1,000
White Pond	500

Frontenac:

Black Creek	2,400
Creek from Mountain Grove to Clear Lake (Olden) ..	1,200
Sharbot Creek	3,800
Trout Lake	2,400

Grey:

Beatty River	500
Beaver River	3,000
Berkeley Lake	1,000
Binns Creek	1,000
Boyd's Lake	1,000
Caseman's Creek	500
Christie Creek	500
Eugenia Lake	2,050
Firth's Creek	1,100
Glen Creek	375
Lee's Creek	500
Miller Creek	1,000
Nigger Creek	500
Rocky River	1,000
Sargent's Lake	2,500
Styx River	1,000
Sydenham River	2,585
Williams Lake	1,000

Haliburton:

Bear Creek	1,500
East River	1,250
Hawk River	1,000
Hollow River	1,250
Little Black River	1,000
McCue Creek	1,500

Hastings:

Bartlett Creek	1,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1936, to March 31st, 1937—Continued

SPECKLED TROUT—Continued

Hastings—Continued			Chidley's Creek	500
Brett's Lake	100		Dartford Creek	3,000
Carleton Creek	200		Dawson Creek	1,000
Cedar Creek	2,400		Duncan's Creek	1,000
Deer River	400		Mill Creek	500
Echo Lake	1,250		O'Grady's Creek	1,500
Egan Creek	3,200		Piper's Creek	500
Fraser Creek	4,800		Robin's Creek	500
Hick's Lake	1,250		Sandy Flats Creek	3,000
Lake St. Peter	2,500		Woodlands Creek	1,000
Limestone Lake	1,000			
Little Papineau Creek	2,400		Peterborough:	
Lott's Pond	1,000		Big Ouse River	1,000
Otter Creek	600		Buchanan's Creek	1,500
Peel's Lake	500		Little Ouse River	2,000
Rawdon Creek	4,800		Long's Creek	3,000
Shire Creek	1,600		Plateau Creek	1,500
Springbrook Creek	4,800			
Squire's Creek	3,000		Simcoe:	
Trout Creek	1,050		Black Creek	10,000
Walterhouse Creek	1,050		Coldwater River	1,000
Walterhouse Lake	2,100		Sheldon Creek	3,000
			Silver Creek	2,000
			Sturgeon River	2,000
			Tenth Creek	200
Lanark:				
Paul's Creek	1,025		Sudbury:	
			Anderson Lake	1,000
Leeds:			Bertrand Creek	1,000
Wilton Creek	500		Green Lake	1,000
			Veuve River	1,500
Lennox-Addington:				
Ashby Lake	2,400		Thunder Bay:	
Beaver Creek	2,400		Ada Lake	500
Enterprise Creek	1,300		Allen Lake	3,000
Little Spring Creek	2,400		Anderson Creek	2,000
			Anna Lake	500
Manitoulin:			Arnold Creek	2,000
Barr's Creek	1,000		Bat Lake	2,000
Blue Jay Creek	5,000		Big Mackenzie River	6,000
Mindemoya River	2,000		Birch Lake	2,000
Srigley Creek	2,000		Bruley Creek	7,000
			Catharine Lake	2,000
Muskoka:			Cedar Creek	4,000
Bella Lake	1,250		Coldwater River	4,000
Big East River	2,500		Corbett Creek	500
Breckenridge Lake	2,000		Current River	10,800
Kay's Creek	300		Echo Lake	2,000
Lake of Bays	2,000		Elbow Lake	4,000
Little East River	3,000		Golden Gate Lake	500
Muskoka River	1,600		Gravel Lake	6,000
Oxtongue River	1,250		Gulch Lake	2,000
Rebecca Lake	1,250		Hoodoo Creek	1,000
Skeleton Lake	1,250		Kaministiquia River	6,000
Spring Creek (Watt)	100		Kowkash River	1,000
			Little Ozone Creek	2,000
Nipissing:			Loftquist Lake	5,000
Balsam Creek	1,500		Loon Lake	12,000
Chippewa Creek	2,012		Loutit Lake	1,000
Dorans Creek	1,500		McIntyre River	5,000
Duschene Creek	1,936		Mac's Lake	2,000
Little Jocko River	3,000		Maud Lake	1,000
			Mine Lake	500
Northumberland:			Neebing River	4,800
Baltimore Creek	3,000		Nipigon River	56,800
Burnley Creek	1,000			

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1936, to March 31st, 1937—Continued

SPECKLED TROUT—Continued

Thunder Bay—Continued	
Oliver Lake	3,000
Pearl River	5,000
Pickereel Lake	4,000
Pitch Creek	4,000
Randolph Creek	1,000
Rangers Lake	2,000
Rocky Shore River	2,000
Spectacle Lake	2,000
Spring Lake	6,000
Squaw Creek	6,000
Squaw River	1,000
Trout Lake (Gorham) ...	12,000
Trout Lake (Stirling)...	2,000
Walker's Lake	2,000
Whitewood Creek	4,000
Wolf River	11,610

Wellington:	
Erin Pond	1,000

Wentworth:	
Spencer Creek	2,500

Sales	5,287
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ADULTS

Algoma:	
Basswood Lake	400
Bridgland River	700
Heyden Lake	400
Lower Island Lake	400
Trout Lake (Aweres)...	400

Grey:	
Firth's Creek	100
Mary's Lake	230
Williams Lake	2,175

Nipissing:	
Chippewa and Duschene Creeks (surplus breeders)	55

Norfolk:	
Walsingham Pond	100

Northumberland:	
Glenfurnte Stream	796
Sales	325

WHITEFISH**FRY**

Kenora:	
Lake of the Woods.....	13,800,000

Prince Edward:	
Bay of Quinte	55,500,000

Rainy River:	
Rainy Lake	14,325,000

Lake Simcoe	3,000,000
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Great Lakes:	
Lake Superior	1,257,000
North Channel	25,510,000
Georgian Bay	74,760,000
Lake Huron	31,990,000
Lake Erie	131,160,000

Lake Ontario	77,100,000
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EYED EGGS

Demonstration purposes ...	112,500
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HERRING**FRY**

Frontenac:	
White Lake	1,000,000

Leeds:	
Charleston Lake	1,000,000
Rideau Lake	3,000,000

Prince Edward:	
Bay of Quinte	730,000

Great Lakes:	
Lake Erie	22,890,000
Lake Ontario	27,500,000

APPENDIX No. 2

ONTARIO DEPARTMENT OF GAME AND FISHERIES
DISTRIBUTION OF FISH ACCORDING TO SPECIES—1933 TO 1936, INCLUSIVE

	1933	1934	1935	1936
Large-mouthed Black Bass				
Fry		35,250	130,000	45,000
Fingerlings	856	4,250	2,153	8,398
Yearlings and Adults		197	27*	.....
Small-mouthed Black Bass				
Fry	545,000	365,500	696,000	780,000
Fingerlings	25,750	35,750	153,065	69,380
Yearlings and Adults	3,471	420	3,433	5,202
Maskinonge—Fry		909,500	460,000	274,000
Perch—Fry		95,000,000	53,031,400	46,080,000
Pickereel—Eyed eggs		5,000,000	2,000,000	2,000,000
Fry	20,500,000	278,470,000	229,629,000	300,759,500
Brown Trout—Fingerlings ..	483,016	138,000	109,000	147,050
Yearlings	674	14,500	9,650	7,290
Adults		689	6*	.....
Lake Trout—Eyed eggs.....	200,000	402,000	.....	3,209,400
Fry	1,400,000	1,265,000	7,773,034	4,165,000
Fingerlings	16,012,700	14,045,450	14,564,000	18,253,244
Landlocked Salmon (Ouanan- iche) (Yearlings) ..		.....	13,640	.....
Rainbow Trout—Eyed Eggs ..		1,000	.....	.....
Fry		4,480	.....	.....
Fingerlings	27,016	312,512	134,075	133,000
Yearlings		25,014	314	3,507
Kamloops Trout—Fingerlings		.....	85,464	.....
Yearlings .....		.....	10,796	.....
Speckled Trout—Eyed eggs..	506,000	.....	.....	28,600
Fry	725,000	.....	1,645,000	182,000
Fingerlings	5,950,255	6,257,267	5,013,831	1,053,050
Yearlings	28,237	34,762	35,421	557,270
Adults	1,549	1,652	5,420	6,081
Whitefish—Fry	372,111,000	376,777,000	296,482,000	428,402,000
Eyed Eggs .....		.....	.....	112,500
Herring—Fry	22,805,000	17,512,000	43,760,000	56,120,000
Golden Shiners		7,000	500	.....
TOTALS	441,325,524	796,619,193	655,747,231**	862,401,472

* Exhibition fish

** This total does not include a distribution of 132,646,600 fry and eyed eggs during the five months immediately preceding the said report.

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of

EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	544	6	204	\$ 17,000	160	\$ 71,885	317	\$ 11,955	531,065	\$ 66,544
Lake Superior	384	12	356	54,000	85	39,285	83	4,495	856,885	85,790
North Channel	195	9	272	63,000	43	35,575	67	4,518	432,375	50,275
Georgian Bay	497	17	435	119,250	136	112,578	98	4,445	1,010,750	109,690
Lake Huron	426	20	518	147,500	127	80,325	38	2,165	1,328,800	168,305
Lake St. Clair	161	.....	.....	.....	57	15,050	110	4,685	.....	.....
Lake Erie	876	33	978	240,200	210	171,670	151	7,347	1,829,170	225,232
Lake Ontario	742	.....	.....	.....	220	100,540	222	7,024	1,239,440	106,631
Southern Inland Waters	455	.....	.....	.....	20	4,825	157	4,871	.....	.....
Totals	4,280	97	2,763	\$640,950	1,058	\$631,733	1,243	\$51,505	7,228,485	\$812,467

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickarel (Blue)	Pickarel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	1,414	1,633,840	277,418	919,198	.....	1,484,510
Lake Superior	2,683,724	319,482	1,596,181	5,895	.....	83,966
North Channel	569	260,247	704,657	58,051	.....	64,214
Georgian Bay	27,274	983,783	1,472,586	46,054	.....	90,701
Lake Huron	170,178	235,304	2,137,519	777	.....	275,405
Lake St. Clair	325	1,100	.....	13,199	6,875	37,934
Lake Erie	78,805	1,767,741	200	1,576	6,878,919	326,095
Lake Ontario	1,332,450	576,196	226,549	100,632	13,707	26,288
Southern Inland Waters	3,823	12,710	43,620	12,963	.....	4,065
Totals	4,298,562	5,790,403	6,458,730	1,158,345	6,899,501	2,393,178
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$214,928.10	\$636,944.33	\$710,460.30	\$69,500.70	\$344,975.05	\$263,249.58

No. 3

DEPARTMENT, ONTARIO

Province of Ontario, for the Year Ending December 31st, 1936.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
...	...	...	49	\$15,760	53	\$1,864	1	\$ 2	1,200	\$ 167	...	...	143	\$ 30,895	116	\$ 13,430	\$ 229,502
...	...	...	47	12,803	...	...	...	...	6	15	...	...	37	16,875	40	12,505	225,768
...	...	...	113	58,790	...	...	...	...	...	...	...	10	45	12,360	35	17,025	241,553
5	900	695	96	79,400	42	510	...	...	57,814	10,735	23	112	55	15,805	67	29,845	483,065
...	...	...	151	88,500	...	...	...	...	10,236	1,685	1	20	74	30,400	28	10,980	529,880
39	11,450	6,130	136	13,225	...	...	...	...	4,500	215	...	...	23	5,260	11	1,020	45,585
50	13,800	8,215	559	274,000	12	195	6	30	3,250	79	...	...	91	87,445	75	29,810	1,044,223
13	1,550	1,195	...	...	736	15,195	26	112	4,358	208	...	...	38	8,475	24	5,355	244,735
61	6,870	5,298	...	...	249	6,885	45	220	7,050	218	206	1,545	29	2,255	3	200	26,317
168	34,570	\$21,533	1,151	\$542,478	1,092	\$24,649	78	\$ 364	88,414	\$13,322	231	\$1,687	535	\$209,770	399	\$120,170	\$3,070,628

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
64,351	...	...	246,499	62,595	1,250	190,995	878	4,882,948	\$480,965.35
476	...	...	104,772	...	...	104,895	...	4,899,391	364,122.66
10,074	...	5,688	13,675	...	...	299,787	56	1,417,018	130,898.60
1,601	...	3,272	131,864	11,694	21,902	70,990	7	2,861,728	297,187.80
4,454	...	115,785	423,345	1,399	6,998	139,153	130	3,510,447	337,598.56
6,760	...	32,501	...	49,666	292,241	209,051	217	649,869	34,848.59
12,486	...	1,254,087	...	70,899	360,508	1,201,610	607	11,953,533	706,376.09
6,440	53,756	164,796	...	191,556	174,908	287,196	11	3,154,485	211,814.88
226	8,024	10,830	...	221,679	308,903	298,351	...	925,194	50,935.96
106,868	61,780	1,586,959	920,155	609,488	1,166,710	2,802,028	1,906	34,254,613	
.40	.07	.05	.06	.08	.05	.03	1.==		
\$42,747.20	\$4,324.60	\$ 79,347.95	\$55,209.30	\$48,759.04	\$58,335.50	\$84,060.84	\$1,906.00		\$2,614,748.49

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES
OF ONTARIO

Kind	1934 Pounds	1935 Pounds	1936 Pounds
Herring	2,876,121	2,528,958	4,298,562
Whitefish	4,922,996	5,478,435	5,790,403
Trout	5,295,174	6,256,336	6,458,730
Pike	1,095,911	1,216,622	1,158,345
Pickrel (Blue)	2,432,093	5,122,997	6,899,501
Pickrel (Dore)	2,292,094	2,431,943	2,393,178
Sturgeon	89,884	110,470	106,868
Eels	63,650	74,947	61,780
Perch	6,018,541	6,039,713	1,586,959
Tullibee	1,105,158	1,071,004	920,155
Catfish	356,665	502,779	609,488
Carp	1,520,848	1,480,506	1,166,710
Mixed and Coarse	3,161,229	2,898,583	2,802,028
Caviare	2,613	2,694	1,906
TOTALS	31,232,977	35,215,987	34,254,613

APPENDIX No. 6

STATEMENT OF ESTIMATED VALUE OF THE FISHERIES OF ONTARIO
1936

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring	4,298,562	\$.05	\$ 214,928.10
Whitefish	5,790,403	.11	636,944.33
Trout	6,458,730	.11	710,460.30
Pike	1,158,345	.06	69,500.70
Pickrel (Blue)	6,899,501	.05	344,975.05
Pickrel (Dore)	2,393,178	.11	263,249.58
Sturgeon	106,868	.40	42,747.20
Eels	61,780	.07	4,324.60
Perch	1,586,959	.05	79,347.95
Tullibee	920,155	.06	55,209.30
Catfish	609,488	.08	48,759.04
Carp	1,166,710	.05	58,335.50
Mixed and Coarse	2,802,028	.03	84,060.84
Caviare	1,906	1.00	1,906.00
TOTALS	34,254,613		\$2,614,748.49

APPENDIX No. 7

ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS
OF THE PROVINCE

1917—1936 INCLUSIVE

1917	\$ 2,866,424.00	1927	3,229,143.57
1918	3,175,110.32	1928	3,033,944.42
1919	2,721,440.24	1929	3,054,282.02
1920	2,691,093.74	1930	2,539,904.91
1921	2,656,775.82	1931	2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49

Thirty-First Annual Report

OF THE

Game and Fisheries Department

1937-1938

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1939



ONTARIO

TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 3 9

TO THE HONOURABLE ALBERT MATTHEWS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-first Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1938.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
Minister in Charge,
Department of Game and Fisheries

Toronto, 1939.

THIRTY-FIRST ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:—

I have the honour to submit to you in this and the following pages the Thirty-first Annual Report of the Department of Game and Fisheries, outlining the activities of Departmental services and including statistical and comparative tables for the fiscal year ended March 31st, 1938.

INTRODUCTORY

The wild life of the Province of Ontario constitutes a resource of tremendous importance and value. It is a heritage of the Crown administered by this Department and the policies which govern the administration of this trust are based on the premise that every citizen has an equity in these resources.

The natural resources of any country are the basis of its national wealth and in evaluating the true worth of our wild life natural resources, it is pertinent to point out that these form a vital part of our economic structure. Analyzing these thoughts we find the following facts:

The fur trade of Canada is closely associated with the development of the country, for the trappers and fur buyers were pioneers in opening up the north and the west. In the Province of Ontario trapping is still more or less extensively carried on. During the year under review trappers in excess of sixty-five hundred were licensed and operating in Ontario, while fur dealers' license fees contributed \$27,438.75 to Departmental revenues, which last fact indicates that the trapper is plentifully supplied with avenues for the disposal of his catch. During the same period royalty to the amount of \$63,632.70 was paid to the Department on furs while the value to the trapper of his season's fur catch is estimated at \$966,552.92. In addition to these figures it is pointed out that private fur farmers raised and disposed of 33,235 silver and black fox pelts, 233 cross fox pelts, and 24,864 mink pelts of an estimated value of \$896,963.15.

It should be noted that in Northern Ontario where the lands are mostly still in the Crown, it is the policy to allot a separate area, consisting of a township or part of a township, to each trapper. While much of the north country is still unsurveyed it is hoped that in the very near future eighty per cent of the trappers will have their trap lines on a defined zone. Each trapper will then be responsible for taking care of the fur-bearing animals in his own area, because his future earnings will depend on his conservation of the supply within the zone.

The commercial fishing industry of the Province employed some 4,440 men during the year ending March 31st, 1938, and had approximately \$3,277,701 invested in gear and equipment, while the sum of \$2,644,163.49 was derived by these commercial fishermen from their operations.

From the economic standpoint, however, the greatest worth of our game and fish resources lies in their attraction to tourists. The seasonal influx of visitors from all parts of the world has developed into an industry of major importance and it is estimated that \$117,029,099.00 was circulated by tourists in Ontario during the year under review. This Province has, of course, many attractions, but the lodestone which exercises the greatest drawing power is the excellent fishing to be had in our many lakes and streams. It will be apparent that the natural resources which are the backbone of such an important industry are of very real economic value.

Again, the importance of bird life as an aid to agriculture is beyond computation. Insect control is essential to crop success. Much of this burden is lifted from the shoulders of the farmers by the migratory and non-migratory birds which are a part of our wild life assets.

From the standpoint of the sportsman this wild life heritage has a recreational value which cannot be measured in terms of dollars and cents. Fishing and hunting are perhaps the very finest of the health-giving and recreational sports available to the people of this Province. The incentive which wild life provides for enjoying the great outdoors is of inestimable value in the development of character and good citizenship.

It is therefore obvious from the foregoing comments and observations that our wild life heritage is a trust of great economic and moral worth, and being a common heritage its preservation and wise use is the care of every resident within our borders. How this Department has administered this trust on behalf of the people of this Province during the period under review is detailed in these pages for the information of all concerned.

FINANCIAL

ORDINARY REVENUE FOR FISCAL YEAR ENDING MARCH 31st. 1938.

ORDINARY—

MAIN OFFICE—

GAME—

Licenses—

Trapping	\$ 29,167.60
Non-resident Hunting	92,370.00
Deer	72,320.10
Moose	3,179.00
Gun	77,780.81
Dog	4,636.10
Fur Dealers	27,438.75
Fur Farmers	8,737.50
Tanners	140.00
Cold Storage	157.00

\$ 315,926.86

Royalty 63,632.70

\$ 379,559.56

FISHERIES—

Licenses—

Fishing	\$ 103,408.66
Angling	331,430.45

\$ 434,839.11

Sales — Spawn taking 72.70

Royalty 10,849.95

\$ 445,761.76

GENERAL—

Licenses—

Tourist Outfitters	\$ 5,790.00
Guides	7,782.00
	<hr/>
	\$ 13,572.00

Fines	11,561.50
Costs	664.62
Sales — Confiscated articles	10,683.74
Rent	3,229.00
Commission	1,959.63
Miscellaneous	231.00
	<hr/>
	\$ 41,901.49
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	\$ 867,222.81

EXPERIMENTAL FUR FARM—

Sales — Pelts	1,258.08
	<hr/>

Gross Ordinary Revenue	\$ 868,480.89
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DEDUCT—

Revenue applied in reduction of Expenditures—

Main Office — Costs	\$ 664.62
Experimental Fur Farm — Sale of Pelts	1,258.08
	<hr/>

1,922.70

Net Ordinary Revenue	\$ 866,558.19
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Again I am privileged to report an increase in the amount of the total ordinary revenue which was collected by this department during the year under review. The total figure of \$866,558.19 is the largest yet produced in any one fiscal year, and is \$84,340.56 in excess of the previous high total, viz:— that of \$782,217.63 collected in 1936-37.

This increase is attributable principally to the larger revenue derived from the sale of non-resident angling and hunting licenses in 1937-38 as compared with the figures for 1936-37. The sale of such angling licenses in 1936-37 produced \$272,690.50 as compared with a total of \$331,430.45 from a similar source in 1937-38, an increase of practically sixty thousand dollars. This is an interesting and encouraging sign. The tourist is evidently finding out what the resident fisherman already knows, that as a result of the energetic restocking of the past few years, Ontario waters keep on improving, despite the intensity with which they are being fished. The economic possibilities of this seasonal business loom larger than ever before, and we believe the people of the Province are becoming increasingly conscious of the necessity for conserving and continually renewing the fish and game resources which add so much to the attractiveness of this Province as a vacation resort. From the sale of non-resident hunting licenses in 1937-38 we derived \$18,432.50 in excess of the revenue derived from that source in the previous fiscal year, so that of the total increase of \$84,340.56 to which previous reference has been made, the sum of \$77,172.45 was due to the increased sale of various non-resident hunting and angling licenses.

Revenue exceeded expenditure, both ordinary and capital, by \$302,619.86. Ordinary expenditures totalled \$513,383.80, some of the principal items of this expenditure being \$212,038.54 on the work of enforcing provisions of the Game and Fisheries Act, and \$166,939.91 on Fish Hatchery Service. Other items of ordinary expenditure include \$10,662.43 spent in connection with the propagation of

game birds and animals and \$4,182.98 at the Experimental Fur Farm at Kirkfield (Victoria County). Expenditures in connection with the payment of wolf bounties totalled \$27,474.24, while grants to various individuals and organizations amounted to \$8,400.00. The total amount paid out for capital expenditures was \$50,554.53, the greater proportion of which amount was spent on projects which were necessary in connection with the expansion of our fish culture services. Some of the principal items were as follows:—Manitoulin Bass Ponds, \$12,911.92; North Bay Trout Rearing Station, \$15,811.04; and White Lake (additional ponds), \$12,465.33.

GAME

The comparative table which follows will show in detail the various hunting licenses, both resident and non-resident, which were issued during the year under review, and such figures for the three previous years. While reference has already been made to the increased revenue derived in 1937-38 from the sale of non-resident hunting licenses, it will be of interest to state that the revenue derived from the sale of resident hunting licenses—deer, moose and gun,—in 1937-38 was in excess of that collected from the same sources in the previous year by the sum of \$19,419.65.

	1934	1935-36	1936-37	1937-38
Resident Moose	512	496	542	580
Resident Deer	12,890	14,779	15,394	18,672
Resident Deer (Camp)	175	258	262	283
Resident Deer (Farmers)	4,902	5,221	5,386	6,503
Resident Gun	76,210	85,884	79,531	90,756
Non-resident Small Game	489	686	1,129	1,634
Non-resident Deer	475	652	848	1,036
Non-resident "General"	457	680	878	1,043

The sportsman to-day is not so much interested in the kill as in the chase, although his pleasure is increased when his efforts are rewarded. Meat, however, is not the primary consideration. Health and "the pursuit of happiness" are the lures which beckon the good sportsman from the artificialities of life to the soothing influence and restful atmosphere of nature. Wild life is but a means to an end, an incentive to physical and mental relaxation.

The following pages contain a summary of conditions as they apply to the game life of the province,—both animal and bird, and which information is compiled from reports submitted by the various members of the field service staff of the Department:—

DEER:—This particularly fine species of game animal continues to be fairly plentiful in various sections of the Province and while the hunting of these animals during the regular open season supplies an exhilarating brand of recreation for the interested sportsman there is no doubt, notwithstanding the fact that there was provision for some minor moderation of the regulations which had previously applied to restrict the taking of does and fawns, that the preservation and possible improvement of the existing deer herds depends very largely upon the protection which the existing provisions of the Game and Fisheries Act provide and the observance of such restrictions by all concerned.

Reports submitted by members of the Field Service staff indicate that so far as the northern and northwestern portions of the Province are concerned generally speaking conditions are quite favourable, though there are various scattered sections throughout this region where such is not the case. The northern districts in the

southern portion of the Province continue to attract the majority of hunters seeking deer, and it would appear that these animals are still sufficiently plentiful and showing some increase in numbers in some sections of these areas, i.e. Parry Sound, Muskoka, Haliburton, Renfrew and the northern portions of Victoria, Peterborough, Hastings, Addington, Frontenac and Lanark, to warrant the belief that this branch of sporting activity will long be available here. In the Counties included in the southwestern peninsula and in certain eastern counties there has been an entire close season on deer for the past several years, and even though these particular counties represent the most settled portions of the entire Province we are able to state that the complete protection which prevails here is resulting in the number of deer increasing in most of these counties. This has been particularly the case in the counties of Bruce and Grey where conditions have been so favourable as to warrant the Department providing a short open season there.

The open season for deer during the year reported on was a highly successful one. Reports to the Department from sportsmen and overseers indicated that as a general rule deer were more numerous in certain sections than was the case in the previous season. While this may in some measure be attributable to a natural movement of the herd, it is reasonable to assume that the comparatively mild winters of the past two years, together with the protective measures in force have resulted in increased reproduction. We are referring, of course, to those areas in which hunting was legal. The Department's Inspector, who was stationed at a strategic point on the highway to check hunters on their return from the north, reported that the consensus of opinion was that there were more deer seen than ever before. A Deputy Game Warden with whom we were discussing the hunt said,—"I have been hunting deer for seventeen years and never saw them so thick as they were this year." Such reports are encouraging, indicating as they do that the deer herd, with a reasonable measure of protection, is capable of replenishing itself despite natural and unnatural enemies.

MOOSE:—This splendid monarch of the Ontario forest is to be found only in the northern portion of the Province though scattered specimens are to be found in Muskoka, Parry Sound, Renfrew and in the sections immediately to the south of Algonquin Provincial Park. Nowhere in Ontario are they plentiful and there is no doubt that the various regulations which exist for the protection of these magnificent animals are absolutely necessary for the welfare of this species. It is only in a few sections that their numbers are reported to be even fairly plentiful, and nowhere has any decided improvement in numbers been observed.

CARIBOU:—These animals are extremely scarce and are reported only from the Districts of Rainy River, Kenora and Thunder Bay, also from the northern portions of Algoma and Cochrane. Some slight increase has been observed in the eastern portion of Thunder Bay and in the Chapleau Game Preserve, which is located in the Districts of Sudbury and Algoma.

ELK:—As has been outlined in previous reports the elk which are to be found in Ontario at present are those which were imported to the Province from Western Canada, and their progeny. The original shipments were made with the approval and co-operation of the Dominion National Parks Branch, and on arrival here were placed on the following Crown Game Preserves, viz:—Pembroke, Burwash, Chapleau, Nipigon-Onaman and Goulais River-Ranger Lake.

There has been some improvement in practically all instances save one,—those liberated on the Nipigon-Onaman Crown Game Preserve. Elk from the herd at Pembroke have been placed in Algonquin Park and on the Bruce Peninsula, while some animals from the herd at Burwash were liberated in territory immediately adjacent thereto. It is reported that their numbers have increased in the Chapleau and Burwash Game Preserves and also on the Bruce Peninsula, while some of these animals have been observed on Beausoleil Island in Georgian Bay off Simcoe County.

BEAR:—These animals are both hunted and trapped but not very extensively, though there is an indication that increasing numbers of non-resident hunters are becoming interested in the spring hunt which has been provided during the months of April and May. They are available in varying numbers throughout the entire northern portion of the Province and are reported to be quite plentiful in many sections, and to a lesser extent in Parry Sound, Muskoka, Haliburton, Renfrew and the northern part of Hastings County.

RABBITS:—Rabbits continue to provide many opportunities which are favourable from the sportsman's point of view, and more particularly is this so in the southern counties. In this section of the Province cotton-tail rabbits are available in satisfactory numbers, while the jack rabbit (European Hare) is pretty well confined to the western counties though this species is slowly extending its numbers to the east and north. In northern Ontario snow shoe rabbits are the prevailing species and although they are reported to be quite scarce there are indications of improvement in some districts.

Rabbit hunting is a favourable activity of Ontario sportsmen during the fall and winter months. The "jack" is probably the most popular of the species because of its size and the open country it inhabits. Its long and powerful legs propel it at tremendous speed and the difficulty of hitting such a fast moving target intensifies the pleasure of the hunt. The "jack" does not readily capitulate. It has power and stamina which provide an excellent defense against all but the most experienced. The varying hare or snowshoe rabbit on the other hand has quite a burst of speed, but lacks the reserve power and physical courage of the "jack". It succumbs readily.

The cotton tail and the hare are in about the same class from the sporting standpoint, although the former provides a measure of additional sport to those who enjoy hunting with ferrets.

Hunters should realize that there is just as much danger of exterminating the rabbit through needless waste as any other species of game. This is particularly true in the more populous areas, where hunting is heavy and habitat restricted. Game which provides such healthy outdoor recreation at a minimum of expense is worth conserving.

SQUIRREL (Black and Grey):—These animals are quite numerous in the southern counties and particularly is this applicable to the western portion. They were afforded the protection of an entire close season which in all probability contributed largely to the improvement evident in the numbers of these varieties of squirrel.

PARTRIDGE:—Conditions as they applied to the various species of this desirable game bird were not sufficiently favourable to justify any action along the lines of an open season.

The sharp-tailed grouse or prairie chicken is found only in the northwestern districts and while scarce they showed signs of some increase.

As far as ruffed grouse are concerned, these birds exist throughout the Province, though their numbers are, of course, quite limited in the more settled sections. However, as previously stated in no section were they in any way numerous though reports received by the Department advised that improvement was noticeable principally in Northern Ontario and the northern districts and eastern counties of the southern part of the Province.

QUAIL:—These birds are found principally in the counties of Essex, Kent, Lambton and Middlesex, and in counties immediately adjacent to the eastern boundaries thereof, and in which section they are fairly plentiful. Scattered bebies of quail are reported also in some eastern counties, that is Stormont, Dundas and Glengarry.

PHEASANT:—During the year reported upon the Department intensified its pheasant re-stocking activities insofar as they applied to live birds, with the result that the distribution of eggs was to that extent curtailed. Departmental records reveal the fact that only 303 settings, or 4,545 eggs, were distributed to interested applicants, while live pheasants numbering 5,076 in all were liberated in suitable areas, 4,703 of which birds were placed in various Regulated Game Preserve areas, a scheme of protected areas inaugurated during the year, and to which scheme detailed reference is made later on in this Report.

The following references concerning the earlier efforts in connection with the re-stocking of pheasants will probably be of sufficient interest to warrant inclusion in this Report.

It seems rather a hopeless task to definitely determine the time and circumstances when the English ring-necked pheasant was first introduced into this Province. The only official record to be found is in the published reports for the Department. It is strange that while reference is made in some of them to conditions, no information is included as to when they were planted or by whom. The first reference found is in a report of the Ontario Game and Fish Commissioners for 1895, and concerns Mongolian and English pheasants, viz:—

“There is an increasing feeling among sportsmen that further and greater efforts must be made in the near future looking towards the restocking of game covers, and quail seems to be the only bird which offers a fair compensation for the outlay of time and money. As is well known, none of the other native birds admit of propagation so that restocking with them is out of the question. Some ardent sportsmen have introduced the Mongolian pheasant and also the English pheasant but sufficient time has not yet elapsed in which to test the success of the experiment.”

The report of the same organization for 1896 mentions the fact that a number of English pheasants, about 120, were reared at Rondeau during the year.

And again in 1901:—“It has been suggested in consequence of the English pheasants that have been liberated on Point Pelee having done so well, that the Point should be made a preserve and no shooting or hunting at any time be allowed on the Point.”

Finally,—reference is made to an open season, and the following is quoted from the Ontario Game and Fisheries Commission (Special Committee) Final Report, 1910,—“The open season for pheasants which was declared during the past year, resulted apparently in the satisfactory discovery that the birds were more plentiful than had been supposed, and most excellent sport would appear to have been enjoyed. Sufficient time, however, has not yet elapsed to enable a determination to be arrived at in regard to the advisability of repeating the experiment of an open season during 1911. Careful investigation should be made at this point by the proper authorities, for the pheasants in some localities have become so well acclimatized and are thriving to such an extent that it would be a grievous mistake to allow their numbers to become unduly diminished.”

HUNGARIAN PARTRIDGE:—These birds are not very plentiful anywhere in the Province. So far as the north is concerned their numbers are negligible though evidence of their existence is reported from certain sections of Thunder Bay, Algoma and Temiskaming. They are most numerous in the very extreme southwestern counties, while reports indicate they are becoming more plentiful in some of the eastern counties. During the year 102 of these birds were distributed by the Department in selected areas.

DUCKS:—Generally speaking this species of migratory waterfowl provides quite a large proportion of the sport which is available to the hunter during any season, and the present restrictions which apply for their protection are providing a measure of conservation which will undoubtedly be beneficial and result in maintaining the supply for the enjoyment of sportsmen in future years. Reports from practically every section of the Province are quite favourable, though there are some areas in the north in which conditions are not too good.

GEESE:—There are not many areas in Ontario in which these birds may be successfully hunted, and while they are observed in flight during the fall and spring migrations in numerous sections the conditions which prevail during these migrations are such that during the open season which is provided any hunting which is available is pretty well restricted to the James Bay shore in the far north, and to a few of the extreme southwestern counties.

WOODCOCK:—This species is extremely scarce in Northern Ontario, and is none too plentiful in the southern portion of the Province. From reports to the Department it is apparent that most favourable locations are in some of the counties along the north shore of Lake Erie.

SNIPE:—As in the case of the woodcock, snipe are extremely scarce in the northern districts. They are reported to be somewhat plentiful in a number of the eastern counties, and while some improvement was observed in scattered areas throughout the southern counties as a general rule their numbers are sufficient to provide nothing more than fair shooting.

PLOVER:—Continues to be very scarce in practically every section of the Province, and no improvement indicated by reports.

During the year under review Regulations were approved which provided for special open seasons, details of which are as follows:—

- (a) Deer in that portion of Carleton County lying west of the Rideau River,—from November 5th to 20th, inclusive. General deer hunting regulations applied.
- (b) Deer in the counties of Bruce and Grey,—from November 8th to 13th, inclusive. General deer hunting regulations applied except that the use of dogs was not permitted.
- (c) Pheasants—Pelee Island, October 28th and 29th. Five birds per day. Special municipal license \$3.
- (d) Pheasants, quail and Hungarian Partridge,—The counties of Essex and Kent, October 28th and 29th. Three pheasants, three quail and two Hungarian Partridge per day.
- (e) Pheasants,—in the following Townships, which were established as Regulated Game Preserve Areas, viz:—Markham, Nelson, Trafalgar, Flamborough, E., Beverley, Ancaster, Saltfleet, Binbrook, Barton, Humberstone, Canborough, Dunn, Cayuga North, Cayuga South, Oneida and Seneca, October 28th and 29th. Three birds per day. Special municipal license \$1. per day.
- (f) Pheasants,—in the following Townships, which were established as Regulated Game Preserve Areas, viz:—Grimsby North, Clinton, Louth, Grantham, Niagara, Caistor, Willoughby and Bertie, October 28th. Three birds per day. Special municipal license \$1.00.

FUR BEARERS

Conditions as they apply to fur bearing animals throughout the Province are set forth in the following references, as summarized from reports of the Field Service staff to the Department:—

BEAVER:—These animals had the protection of an entire close season, though it was found necessary to open the season on Manitoulin Island for the first fifteen days of November. Trapping of these animals under the regulations which prevailed restricted such operations to trappers and farmers actually resident on Manitoulin, limited the catch of each person to not more than ten beaver, and required that pelts so taken be disposed of under supervision of the Department. The close season which has been in effect has resulted in a noticeable increase in the numbers of these animals practically throughout the entire Province.

FISHER:—This species is extremely scarce throughout the Province and few if any are taken anywhere south of the French and Mattawa Rivers.

FOX:—Conditions remained pretty much the same in the various sections in which these animals have been found, with improvement and decreasing numbers reported from different districts. There was unquestionably no general increase, which would appear to be supported by the fact that there was quite a noticeable decrease in the numbers of the various species of fox taken during the season. Silver fox now are very seldom taken in the wild.

LYNX:—This species also is extremely scarce everywhere in the Province, and while the pelt is one of the most valuable of those taken in the wild the trapper does not derive much of his revenue therefrom.

MARTEN:—Very scarce, and while there was an increase in the number of pelts taken during the season, such increase should not be regarded as an indication of any permanent or general improvement.

MINK:—There would appear to be no doubt that this species is becoming less numerous in many areas. There were few sections in which conditions were favourable or any improvement observed.

MUSKRAT:—Conditions in Northern Ontario particularly were not at all good, and while there were some sections in Southern Ontario from which favourable reports were received, generally speaking conditions here were only comparatively fair. The decline in the annual catch which has now been progressing over a number of years continued during the season reported upon.

OTTER:—These animals are to be found chiefly in Northern Ontario, and even there they are not particularly numerous. Conditions remained about the same as is indicated by the annual take. While continuing scarce some improvement was reported in scattered areas.

RACCOON:—This species does not inhabit the north. General conditions in southern Ontario remained about the same. They are not plentiful anywhere, and reports indicate that generally speaking their numbers are possibly decreasing to some extent.

SKUNK:—While these animals were reported to be very plentiful throughout the entire Province there was quite an extensive decrease in the number taken by trappers during the season.

WEASEL:—This species continues to be very plentiful in every portion of the Province, with the possible exception of certain counties in the southwestern peninsula. The catch was about the same as in the previous year.

There can be no question as to the necessity of the present restrictions which are provided by the Game and Fisheries Act as a means of protecting existing fur bearing animals in this Province, and while in some particular instances these regulations may appear to be unnecessary appearances of such a nature are deceptive. As a general rule the more desirable species of fur bearers are diminishing in number, no doubt attributable for the most part to decreased suitable and available habitat as well as to the intensified trapping operations to which these animals have been subjected in past years. In Northern Ontario all the species of fur-bearing animals mentioned in this report are to be found in varying numbers while in Southern Ontario at the present time fur bearing animals would include fox, mink, muskrat, raccoon, skunk and weasel, and, to a lesser extent beaver and otter, the other species herein referred to being practically extinct in this section.

There is no doubt that the year under review was an extremely difficult one for the trapper, because as will be observed from the following comparative statement not only was there a considerable decrease in the number of pelts actually taken and disposed of but the prices which these pelts commanded on the open market were indeed quite low, and much below what has been recorded as average in more recent years.

This comparative table shows the numbers of pelts of the various species of fur bearing animals which were exported from or dressed within the Province, during the year under review as well as in the two years immediately preceding:—

	1935-36	1936-37	1937-38
Bear	411	476	496
Beaver	6,785	238	235
Fisher	2,137	2,117	1,463
Fox (cross)	5,424	4,156	2,426
Fox (red)	37,044	35,232	24,912
Fox (silver or black)	500	360	201
Fox (white)	883	17	47
Lynx	2,642	2,081	1,284
Marten	1,282	1,464	1,709
Mink	47,057	33,930	22,766
Muskrat	398,043	370,239	343,972
Otter	3,701	3,779	3,737
Raccoon	13,259	14,243	13,194
Skunk	50,747	87,950	61,576
Weasel	42,643	78,643	79,853
Wolverine	4	2	5
	<u>613,057</u>	<u>635,203</u>	<u>557,876</u>

Information compiled in the Department shows that these furs were worth to the trappers responsible for taking the same, the sum of \$966,552.92, which is but little more than fifty per cent of the amount realized from such sales in the previous year.

To these figures should be added statistics as they apply to the product of licensed fur farms not subject to the payment of royalty, including silver, black and cross foxes and mink. Furs disposed of during the year by these fur farmers included 33,235 silver fox pelts worth \$683,643.95, 26,480 of which were exported and the remaining 6,755 dressed in the Province; 24,864 mink pelts worth \$209,852.16, 24,381 of which were exported and the remaining 483 dressed in the Province; and 233 cross fox pelts worth \$3,467.04, 192 of which were exported and the remaining 41 dressed in the Province.

FUR FARMING

During the year there were 1,536 licenses issued to authorize fur farming operations. Of this number some 331 were new licenses. As compared with the previous year there was a net increase in the number of licensed fur farms under operation totalling 188. The records show that silver foxes were raised on 986 of these fur farms, cross foxes on 103 fur farms, red foxes on 133 fur farms, mink on 614 fur farms, and raccoon on 91 fur farms. There were 859 fur farms on which operations were confined to foxes, 451 fur farms on which only mink were raised, while on 38 fur farms only raccoon were propagated. On the remaining 188 fur farms operations were not limited to any one species.

The subjoined comparative table shows the total breeding stock retained on these licensed fur farms as on the first day of January in each of the years included therein:—

SUMMARY OF BREEDING STOCK ON LICENSED FUR FARMS
AS AT JANUARY 1ST

	1936	1937	1938
Beaver	70	21	25
Fisher	16	20	16
Fox (cross)	367	257	235
Fox (red)	228	207	140
Fox (silver or black)	21,645	23,869	24,848
Fox (blue)	5	0	0
Lynx	2	2	2
Mink	12 332	15,539	21,982
Muskrat	375	351	302
Raccoon	524	358	351
Skunk	3	5	9
Bear	21	15	15
Marten	4	4	11

It will be observed that silver fox and mink represent by far the greater proportion of the activities which are carried on by the operators of these licensed fur farms, and though in each instance an increase is indicated, that in the case of mink far exceeded the increase in silver fox. The raising of mink is rapidly becoming an important branch of the fur farming industry. One can realize the truth of this statement when it is noted that the stock of mink maintained on these fur farms increased from 8,605 to 21,982 in a period of only three years.

CROWN GAME PRESERVES

One of the first measures taken to preserve the game in the Province of Ontario was the setting aside of large areas of land as Provincial Parks. In these Parks no hunting or trapping is permitted and the wild life is given a chance to increase and develop under natural conditions and without molestation from man. These protective areas proved so successful that the idea was extended and large areas of crown lands in Northern Ontario have been set aside for the same purpose under the Department of Game and Fisheries. These areas are known as Crown Game Preserves. At the present time there are 116 such Crown Game Preserves with an area of approximately 6,068,914 acres.

While the largest portion of this area is situated in Northern Ontario it has been possible to establish a number of preserve areas in the southern part of the Province with the co-operation of owners of private property. These areas will be primarily useful for the protection and propagation of upland game birds, although all species of desirable game will be protected.

It is generally acknowledged that where wild life is allowed to propagate with a minimum of human interference and in surroundings which provide natural food and cover there will in time be a return to the normal conditions set up by nature. This means not only increased game in the protected areas but a general improvement in conditions throughout the Province.

During the year five additional Crown Game Preserves were established in southwestern Ontario in accordance with the schedule appended hereto, and changes were made in the boundaries of the Jocko Crown Game Preserve in the District of Nipissing and in the Peasemarth Crown Game Preserve, in the County of Grey.

Designation	County	Extent in Acres
Crosshill Crown Game Preserve.....	Waterloo	1,200
Highgate " " "	Kent	575
Long Branch " " "	Peel	450
Wainfleet " " "	Welland	5,000
Windham " " "	Norfolk	400

REGULATED GAME PRESERVE AREAS

The year saw a new development in the matter of the control of indiscriminate hunting. In line with the desire to provide better hunting and to maintain in large measure the privilege which sportsmen have enjoyed for generations of using private lands in the pursuit of game, arrangements were entered into between the Department and some twenty-seven Townships whereby hunting in these Townships would be restricted to certain open seasons for pheasants and rabbits, and that only those who had the necessary hunting license issued by the Municipality would be authorized to take advantage of the open dates. This had the effect of creating these areas as Regulated Game Preserves because of the fact that hunting was prohibited except on open dates as proclaimed on the recommendation of the Department. These open dates were limited to a two-day pheasant shoot and a seasonal period during the winter for rabbit hunting. It had an additional effect of preventing an influx of non-residents to the area because the number of special licenses issued was based on the number of available pheasants and only those with a pheasant license were permitted to partake in the rabbit hunting. The Municipality collected a small fee for the license. The Department stocked these areas with several thousand live birds and hopes to largely increase its pheasant production for the restocking of these Regulated Areas.

By concentrating the restocking of pheasants on these Regulated Areas, rather than scattering the available birds over a large section of Southern Ontario and thereby thinning the numbers in most counties below the point where hunting is desirable, it is believed a sufficient quantity of birds will be raised to warrant an open season. The bag limit which would apply during an open season would permit the taking of cock birds only. Continuous replenishment of the stock will be part of the plan so that an open season simply means a temporary reduction of the surplus stock. In other words protecting the hens will maintain an ever increasing brood stock and the surplus destroyed during a shoot will be replaced to take care of the next open season.

Several specific and important results are anticipated from this arrangement. First, and quite important, is the fact that the farmer will not be subject to the expense and inconvenience of having irresponsible hunters tramping over his lands and damaging property during the whole gun license season. It is well known that the actions of a few have brought about a feeling of animosity between the farmer and the sportsman, a situation which threatens to put an end to free hunting. Those who

obtain a license during the open season will be readily identified, and abuse of the privilege will mean prosecution and cancellation of any future privileges. As the carrying of fire-arms for hunting purposes within such Regulated Areas is forbidden, except during such open seasons as may be prescribed and then only under the authority of a special license, it is hoped to eliminate practically all of the poaching which otherwise takes place.

It is pleasing to learn that the open seasons established in these Regulated Townships were quite successful and have done much to stay the epidemic of land posting which threatened so seriously to curtail the opportunity for hunting over private lands. It is not suggested, of course, that the present arrangements are perfect, experience will doubtless bring minor changes in control and regulation but the inauguration of such a scheme will, we believe, receive the approbation of every sportsman when its underlying benefits become better known.

The various townships which entered this scheme of Regulated Game Preserve Areas during the year are as follows:—

The Township of Markham, in York County;

The Townships of Nelson and Trafalgar, in Halton County;

The Townships of Flamborough East, Beverley, Ancaster, Saltfleet, Barton and Binbrook, in Wentworth County;

The Townships of Grimsby North, Clinton, Louth, Grantham, Niagara and Caistor, in Lincoln County;

The Townships of Stamford, Willoughby, Bertie and Humberstone, in Welland County;

The Townships of Canborough, Dunn, Cayuga South, Cayuga North, Oneida and Seneca, in Haldimand County.

Part of the Township of Westminster, in Middlesex County;

The Township of Bayham, in Elgin County.

WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty statistics covering the last four fiscal years:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Oct. 31, 1934.	990	812	57	1,859	\$27,080.65
For year ending Mar. 31, 1936.	1,159	1,713	33	2,905	42,399.89
For year ending Mar. 31, 1937.	1,090	1,197	31	2,318	33,360.63
For year ending Mar. 31, 1938.	1,022	837	30	1,889	27,474.24

During the year 1,380 claims for wolf bounty were paid in respect of 1,889 wolves as shown above, in addition to which 19 claims were disallowed for various reasons. Bounty was paid to 1,109 different persons, 735 of whom applied in connection with only one wolf each. Applicants submitting claims on two wolves numbered 179. The remainder of the applicants had claims for varying numbers, while the largest total bounty paid to any one person amounted to \$210.

Details as to the sources of origin of the pelts submitted for bounty are set forth in the following table:—

REPORT OF WOLF BOUNTY CLAIMS

District or County	Adult Wolves		Pups	Total
	Timber	Brush		
Algoma	82	109	0	191
Bruce	13	6	0	19
Cochrane	38	2	4	44
Frontenac	6	0	0	6
Grey	0	2	0	2
Haliburton	8	0	0	8
Hastings	8	4	6	18
Huron	1	0	0	1
Kenora	263	144	16	423
Lambton	0	4	0	4
Lanark	1	1	0	2
Leeds	1	0	0	1
Manitoulin	13	111	1	125
Muskoka	12	6	0	18
Nipissing	38	11	0	49
Norfolk	0	1	0	1
Lennox & Addington	7	1	0	8
Parry Sound	59	3	0	62
Patricia	59	21	2	82
Peterboro	1	0	0	1
Rainy River	155	188	3	346
Renfrew	24	0	1	25
Simcoe	11	1	0	12
Sudbury	62	114	0	176
Temiskaming	2	2	0	4
Thunder Bay	161	112	3	276
Waterloo	1	0	0	1
Welland	0	1	0	1
York	0	1	0	1
Totals	1,026	845	36	1,907

While the total expenditures incurred in connection with the administration of the Wolf Bounty Act amounted to \$27,474.24, actual bounty payments accounted for \$27,204.00 of this total, details of which are contained in the following statement:—

Brush Wolves (Counties)	21 @ \$ 6.00	\$ 126.00	
(Districts)	816 @ \$15.00	\$12,240.00	
Total Brush Wolves	837		\$12,366.00
Timber Wolves (Counties)	71 @ \$ 6.00	\$ 426.00	
(Districts)	951 @ \$15.00	\$14,265.00	
Total Timber Wolves	1,022		\$14,691.00
Pups (Counties)	1 @ \$ 2.00	\$ 2.00	
(Districts)	29 @ \$ 5.00	\$ 145.00	
Total Pups	30		\$ 147.00
Grand Total	1,889		\$27,204.00

In the northern districts the Province pays the entire bounty, but so far as claims originating in the southern counties are concerned, bounty is paid by the County Treasurers and forty per cent rebated to the counties by the Province.

Trappers and farmers were responsible for taking more than eighty per cent of the wolf pelts submitted for bounty, while it is reported that forty-five per cent of the animals were snared, twenty-six per cent trapped, twenty-one per cent shot, and the authorized use of poison was responsible for taking only three per cent. The remaining five per cent were taken by miscellaneous means.

GENERAL

GAME & FISHERIES ACT.

The Game and Fisheries Laws are an important part of the Department's programme to properly conserve the heritage with which it is entrusted. They are not merely regulatory or restrictive but are, in reality, the controlling factors which determine the abundance or otherwise of our wild life resources. They are the result of biological knowledge and practical experience, and have been framed with due regard to the life history of the various species, particularly that phase of it which determines perpetuation. These laws have many classifications but in general they are intended to develop all classes of desirable wild life while permitting the greatest possible use of these resources, and to discourage certain undesirable forms which do not fit into the economic scheme of things.

A study of the laws and regulations will convince the most skeptical that they are an important part of the programme necessary for the conservation of our fish and game resources and that when the public is urged to observe the laws it is a request for co-operation in the management of a valuable trust. Non-observance of the regulations, however unimportant the details may seem, is unfair to that ever-increasing family of sportsmen and nature lovers who conscientiously obey the laws and pursue their recreational pleasures from the highest standard of sportsmanship.

Amendments enacted by the Legislative Assembly and which became effective during the year included the following provisions:—

- (a) Open season and other regulations governing the hunting of woodcock, snipe, ducks, geese and other migratory water-fowl to be as provided by the Migratory Birds Convention Act (Canada).
- (b) Parties of non-resident hunters to engage licensed guides when hunting moose.
- (c) Non-resident bear hunting license for the months of April and May at a fee of \$5.25.
- (d) Adjustment of royalties on the pelts of certain fur-bearing animals,—lynx, mink, otter and skunk. Ranch raised cross fox exempted from royalty.
- (e) Taking of does and fawns permitted in the proportion of one doe or fawn for each two hunters in the party.
- (f) Use of snares prohibited in Peel and Carleton Counties.
- (g) Permitting use of an automatic shot gun when so permanently reconstructed and plugged as to be capable of holding not more than two shells at any one time.

Amendments to the Fisheries Regulations adopted during the year included the following provisions:—

- (a) Minor changes in the open seasons for pickerel, lake trout and whitefish in certain northern districts.
- (b) Persons engaging licensed guides while angling not to include such guide as one of their number when computing the number or quantity of fish they are entitled to take.
- (c) Exportation of maskinonge by non-resident anglers restricted to one day's catch.

TOURIST OUTFITTERS.

Complete reference to the system of licensing tourist outfitters operating in the northern portion of the Province was embodied in the previous Annual Report. The following analysis shows the distribution by Districts of the 498 camps which were licensed to operate during the year under review:—

TOURIST OUTFITTERS CAMP LICENSES SUMMARY

Algoma	73
Cochrane	2
Kenora	103
Manitoulin	37
Nipissing	91
Parry Sound	90
Patricia	1
Rainy River	28
Renfrew	10
Sudbury	47
Thunder Bay	15
Temiskaming	1
Total	498

Four hundred and fifty-six of these camps were operated by residents of Ontario, the remaining forty-two by non-residents.

EDUCATIONAL.

In a previous report reference was made to the preparation and distribution of a Monthly Bulletin. This publication was originally produced wholly in the Department and took the form of a mimeographed booklet. Because of the work entailed it had necessarily a limited circulation, although many requests for copies were received. To ensure a wider distribution and to take care of the increasing demands for copies from Protective Associations, schools and private individuals, it was found desirable to have the material printed. Beginning with the May, 1937, issue, therefore, the Bulletin assumed a new form, and a greater significance as an educational medium in the sphere of wild life conservation. The original issue amounted to about 600 copies monthly, under the new scheme of publication the circulation immediately doubled and since then it has continued to increase with each issue.

In this connection we quote the following editorial comment from the June, 1937, issue of this Monthly Bulletin:—

"Education is the foundation of all intelligent thought and action. It is the most important factor entering into the conservation of our wild life and other natural resources. Such progress as has been made in protecting, propagating and re-stocking is due to the practical knowledge and scientific attainment. Practical knowledge of wild life conditions is the result of experience gained in actual personal contact and observations under natural conditions. It is not always reliable taken alone because unwarranted conclusions are frequently drawn from certain conditions or experiences which are open to several explanations. However, the practical value of such first-hand information is of very great importance as it serves to confirm the conclusions arrived at through scientific investigation. The combination of these two sources of knowledge is the basis of our conservation programme."

"Knowledge, however, is progressive. It knows no limitation. The ideas of yesterday are but the stepping-stones to future enlightenment and creative effort. In the field of wild life conservation more attention is being paid to the scientific investigation of life history and environmental conditions. The idea that our wild life resources are inexhaustible passed on with the horse and buggy and the carrier pigeon. Nature provided certain fundamental conditions necessary to wild life perpetuation. We have unwittingly disturbed these conditions and so, in order to keep pace with modern demands, we must take advantage of modern knowledge and experience. This means wise conservation laws based on biological knowledge and practical experience; the investigation of life history and natural conditions; the operation of hatcheries for intensive stocking; the setting aside of preserve areas for natural propagation and development, and the passing on of the knowledge acquired to the public through means of education and publicity. These things, the Department of Game and Fisheries is attempting to do. The results so far have justified the effort."

"The sportsman can do much to foster these plans by co-operating wherever practicable and by lending his aid to put across the ideals of conservation. These ideals have been developed over a long period of years. They embody the results of progressive thought and scientific knowledge, therefore they are modern and worth while. They proclaim individual responsibility as necessary to success, and organized effort the best method of accomplishing the greatest good for the greatest number. In short, conservation is education practically applied, and is the care of everyone interested in wild life preservation or better hunting and fishing."

ENFORCEMENT SERVICE

Many people, who take but a superficial view of the matter, believe that all that is necessary to eliminate and control the ills which afflict organized society, is to enact regulatory laws designed to take care of the problem or problems involved. Laws are essential and necessary to good government, but they are not in themselves a panacea for all the troubles which beset our social and economic systems. Experience has demonstrated that the fewer the laws and the simpler their enactments to cover any particular subject the more effective is their enforcement.

The Game and Fisheries Laws are necessary to the proper administration and perpetuation of our wild life. They are designed with a view to providing the greatest possible individual liberty consistent with the wise use of the resources involved. These laws are respected by a large majority of the citizens of the Province and their observance becomes more and more a passport to good sportsmanship. However, despite their simplicity, we still have the law breaker, the man who continues to ignore legal restrictions and thereby takes unfair advantage of those who "play the game". It is too much to hope that we can entirely eliminate this offender, but there is good reason to believe that through our united efforts we can do much to show the careless and the thoughtless that observance of and respect for the Game and Fisheries Laws is quite an important feature in the protection and development of our wild life natural resources.

To administer and enforce the provisions of the Game and Fisheries Act the Department maintains a regular staff of Field officers throughout the Province. These men are designated Overseers or Game Wardens, and their duties consist of securing observance of the laws and regulations pertaining to fishing, hunting and trapping. Their task is a difficult one though they are invariably courteous but firm in carrying out their duties. These permanent members of our field staff constitute an important section of the protective service. However, their services are augmented by the assistance and co-operation of members of the Ontario Provincial Police Force as well as certain seasonal officers who are retained for varying periods in the matter of providing adequate patrol service along certain waters during the spring and fall fish spawning periods and protective work during the various hunting seasons.

Interested sportsmen also play a large part in the work of protecting our fish and game resources. During the year some 876 sportsmen conservationists offered their services and were accepted as Deputy Game Wardens, and as such are authorized to assist in obtaining proper observance of the Act and Regulations. The practical support and moral effect of this army of voluntary workers is of very great importance in preventing abuses of the privileges enjoyed by sportsmen.

The Department deplores the fact that it is necessary to prosecute in order to obtain proper observance of the Game and Fisheries Laws. It is hoped that through education, an enlightened public opinion, and a general knowledge of the value of our resources the law breaker will become so unpopular that his depredations will be considerably reduced. In the meantime, however, the poacher, the unscrupulous trapper and the petty lawbreaker still keep the enforcement officers busy.

During 1937-38 there were some 1362 cases in which offenders against provisions of the Game and Fisheries Act and Regulations were apprehended in their offences by members of the Field Service Staff who promptly relieved those involved of the articles of sporting equipment they carried as well as the unlawful game or fish they might have had in their possession on such occasions. From an examination of the reports supplied in these cases it is learned that action was provided by

Game and Fisheries Overseers in 1157 of these cases, by Deputy Game Wardens in 62 cases, by members of the Ontario Provincial Police Force in 48 cases, and in the remaining 95 cases by co-operative action amongst Overseers, Deputy Game Wardens, and Provincial Police Constables.

A condensed summary of the material confiscated shows the following:—

Live animals	in 7 cases
Birds, game animals and meat	in 160 cases
Firearms and ammunition	in 460 cases
Fish	in 209 cases
Nets and fishing equipment	in 213 cases
Angling equipment	in 84 cases
Pelts and hides	in 228 cases
Traps and equipment	in 166 cases
Water craft	in 29 cases
Motor vehicles	in 11 cases
Lights	in 21 cases
Spears	in 66 cases
Miscellaneous	in 52 cases

Duplicate entries on one seizure report, such as firearms and game; angling equipment and fish; trapping equipment and pelts, and other combinations of a similar nature account for the apparent discrepancy in the total shown by the foregoing table, viz, 1706, as compared with seizure reports numbering 1362.

Departmental records disclose the fact that during the year reported upon some 1108 cases were prosecuted through the courts, and that convictions were registered in 1045 of these cases, while charges in the remaining 63 cases were dismissed by the Magistrates who presided thereon. Game and Fisheries Overseers prosecuted in 960 cases and were successful in 913; Provincial Police Constables in 67 cases and secured convictions in 62; Deputy Game Wardens in 18 cases in 16 of which convictions were registered; while co-operative action by Overseers, Provincial Police and Deputy Game Wardens resulted in 54 convictions out of the 63 cases prosecuted.

While each officer is required to be impartial and efficient in the carrying out of his duties he is also required to use common sense and display courtesy in his treatment of the general public with whom he comes into contact. We believe that as a general rule the members of our enforcement service are guided by these requirements at all times. Public service is synonymous with criticism rather than commendation. The control which is essential to the proper administration of a trust, such as our wild life resources, is often irksome to those who object to anything in the nature of restrictions on their so-called "liberties". As a consequence enforcement frequently results in irritation. For this reason we are always glad to receive letters such as the following from one of our United States visitors who resides in the State of Ohio. He writes, "For ten years I have been coming to your Province to do my fishing and the courtesy and consideration extended to me by the officials of your bureau and the citizens of the various communities visited has been very gratifying to me."

THE FISH CULTURE BRANCH

Waters abounding in fish are an asset to any community. Increased fishing possibilities mean increased tourist travel; this stabilizes various business enterprises, especially in recreation centres noted for their game-fish. Apart, however, from the direct and indirect financial benefits of a rapidly increasing tourist trade, the healthful and recreational advantages associated with game-fishing are of inestimable value.

The maintenance of the commercial fishing industry is also of vital importance to the Province. Information regarding the value of this enterprise is summed up in the statistics of the fishing industry for the year in appendices 3 and 4.

The successful maintenance and increased usefulness of these interests are being developed in a variety of ways and the re-stocking of lakes and streams in a practical manner is of outstanding importance in this connection. To this end a vigorous fish cultural programme is being pursued with satisfactory results.

HATCHERIES AND REARING STATIONS

During the year the Department operated twenty-four fish cultural stations. The actual number of hatcheries operated was twenty; trout rearing stations, eleven; bass rearing stations, four, and additional facilities were provided as outlined in the following paragraphs.

At the Fort Frances hatchery facilities were provided for carrying lake trout to the fry and early fingerling stages.

An excellent site for bass rearing ponds was located at the outlet of Lake Manitou, Manitoulin Island, in the vicinity of Sandfield. One pond was completed before the end of the year and was used, successfully, for wintering trout fingerlings to the yearling stage.

A second bass rearing pond, approximately one acre in area, was provided at the White Lake Station, Frontenac County. Speckled trout were wintered in this new pond very successfully.

An additional trout pond was added to the series of three on the property of the Ontario Government Reforestry Station at Midhurst, and acquired for use by the Department.

The water supply from Waring's Creek, located one and one-half miles west of Picton, was used for rearing trout fingerlings. This station was provided with outside rearing troughs of portable construction.

SPECKLED TROUT:

The Department continued the policy of rearing large numbers of trout to yearling and older stages for distribution to suitable public waters. The results of this plan have been successful.

The following comparative distribution figures indicate the progress that is being made:

	1936	1937
Yearlings	557,270	1,167,073
Adults	6,081	16,150

In addition, 384,725 fingerling trout were planted, slightly more than one-third the number planted the previous year. The entire abandonment of the distribution of trout fry and fingerlings is contemplated, with the exception of any surplus which cannot be accommodated in our rearing stations.

BROWN TROUT:

Excellent progress was made in regard to rearing brown trout to the yearling stage. During the year 97,484 yearling and older brown trout were distributed as compared with 7,290 during a similar period in the preceding year.

Encouraging reports of successful angling for this species have been received and intensive re-stocking of suitable streams in southern Ontario is being pursued on the basis set forth in the two preceding reports.

RAINBOW TROUT:

(a) Steelhead Trout—

The waters chosen for the planting of steelhead trout were such as to fulfil the natural requirements of this species; the number of steelhead rainbows planted was somewhat less than the number planted in 1936, but the number of Kamloops trout (an allied species) distributed made up for this deficit.

(b) Kamloops trout—

This variety of rainbow trout is native to a number of lakes in the interior of British Columbia. It is an excellent sporting fish and may be taken on the fly and by trolling. Excepting during hot summer weather they are usually taken near the surface. One important characteristic is that they show very little tendency, if any, to migrate from the lakes in which they are planted.

Speckled trout lakes supplied with good tributary streams are considered suitable for Kamloops trout.

Eighty thousand fingerlings of this species were planted during the year.

Returns from previous plantings in Echo Lake (Muskoka) and a small lake adjacent to Lake Timagami, are, we hope, forerunners of greater success to be achieved from the distribution of this important variety to a number of our lakes.

LAND-LOCKED SALMON:

The Department was unable to secure any eggs of this species from the Province of Quebec or elsewhere. The land-locked salmon hatchery at St. Felicien, Quebec, has not operated for some time.

A small number of fry of the Atlantic salmon, a closely related species, were planted on an experimental basis.

A few excellent specimens of land-locked salmon planted in Skeleton Lake, Muskoka District, have been caught by angling.

LAKE TROUT:

There was an increase in the distribution of eyed eggs and fry over the number distributed in the preceding year amounting to 7 per cent. There was a decrease in the distribution of fingerlings amounting to 13.6 per cent. For the egg collection, the Department depends on the co-operation of the fishermen and the work of our own spawntaking crews. Stormy weather in the fall, either continuously or intermittently, interferes with the work; this condition was particularly detrimental during the fall of 1937.

WHITEFISH:

There was a decrease of approximately 9.6 per cent in the distribution of whitefish as compared with that of the previous year; this was due to the reduced collection of spawn from the North Channel and Lake Ontario whitefish.

HERRING:

The large decrease in the distribution of herring fry was due in the main to the reduction in the collection of eggs from Lake Ontario herring and a greater reduction in the collection from Lake Erie herring, the latter collection being practically negligible. There are very hopeful signs that the population of herring in Lake Erie is gradually increasing after the disastrous decline in 1925. If the present population is permitted to spawn at least once, and preferably twice, before they are taken commercially, there will be a decided increase of this very important commercial species. As a result large collections of spawn should be available in future years.

YELLOW PICKEREL:

There was a decrease of 12.4 per cent in the distribution of pickerel fry as compared with that of the preceding year, due primarily to the reduced collection of pickerel spawn in the southern portion of Lake Huron.

Following the usual practice, two million eyed eggs were handled by the Sparrow Lake hatchery, the fry being distributed to suitable areas of Sparrow Lake.

SMALL-MOUTHED BLACK BASS:

Excellent results were obtained in connection with the culture of small-mouthed black bass; the increased production of fry and fingerlings was 63.4 per cent and 104.5 per cent, respectively, over that of the previous year.

There was also a slight increase in the distribution of yearlings and older bass, as a result of bass harvesting from natural areas; a limited amount of this work is conducted by our hatchery officers, annually.

LARGE-MOUTHED BLACK BASS:

Following the previous year's practice, one pond was operated for the production of this species with satisfactory results. This pond, which is 0.64 acres in area, produced 135,000 fry and 4,120 fingerlings.

YELLOW PERCH:

Due to a diminished run of spawning fish, there was considerable reduction in the number of perch eggs collected by the commercial fishermen in the vicinity of the Kingsville hatchery, where the eggs are cultured to the fry stage.

BLUE PICKEREL:

Blue pickerel spawn was collected in the west end of Lake Erie and cultured to the fry stage in the Kingsville hatchery; this was the first time that such work was undertaken by our Department.

This is a species of considerable commercial value in Lake Erie, and artificial culture is one way by which its maintenance may be assisted.

MASKINONGE:

The distribution of maskinonge fry was increased 53.5 per cent over that of the preceding year, due largely to a much more satisfactory collection of eggs. One chief drawback was prevailing cold weather during the incubation period, which retarded development. This condition was followed by a sharp rise in temperature, causing too rapid development and hatching.

The difficulties surrounding the culture of this important species were outlined in the previous year's report, and the information given applies with equal force to the results obtained in 1937.

In Wisconsin the culture of maskinonge has been pursued for thirty to forty years. A large number of eggs are collected from areas where the parent fish are abundant, and a large number of fry are planted annually, but the rearing of fingerlings is a much more difficult matter; Wisconsin is reported to have reared 1,417 fingerlings of this species in 1937. New York State has likewise pursued the culture of maskinonge for over thirty years. This work is concentrated on Lake Chautauqua where parent maskinonge are plentiful and, therefore, egg collection and fry production large; in 1937 it is recorded that New York State planted 856 maskinonge fingerlings. In Minnesota progress along these lines has been slow on account of the scarcity of the breeding fish. Small numbers of fry have been distributed, but there is no authentic or definite record of the number of fingerlings actually reared up to and including 1937.

In Ontario these activities are concentrated in the Kawartha Lakes region and for good reasons. In the first place, these waters have the necessary or essential conditions for producing maskinonge. Secondly, this area requires intensive restocking on account of the intensity of the fishing. A good indication of the capacity of these lakes to produce maskinonge is given in the statistics of catch from 1892 to 1901, when this important species was taken in large numbers, commercially.

The Department is endeavouring to maintain and to build up the maskinonge supply in a variety of ways, which may be summed up in a more or less concise manner as follows:

1. Restricted bag limit and restricted number of days' fishing.
2. Protection of the normal population in sanctuary areas, taking in waters adjacent and outside these areas only the natural increase from them. An explanation of the purposes of these sanctuaries was given in detail in the previous year's report.
3. The planting of fry in suitable areas.
4. Further studies regarding the possibilities of rearing fry to the fingerling stage.

CLOSED WATERS

In addition to those waters already closed for the natural protection and propagation of fish, the following closures were authorized during the year.

(a) For Speckled Trout Propagation:

DUCHESNEY CREEK,

Townships of Commanda and Widdifield, District of Nipissing.

IDLWYLD STREAM,

Township of Waterloo, County of Waterloo.

JOHNSON CREEK,

Townships of Kowkash, Paska, and Rupert, District of Thunder Bay.

LITTLE JOCKO RIVER,

From Morrow's Dam, east to its outlet into Big Jocko River, District of Nipissing.

MALTA LAKE,

Township of Boulter, District of Nipissing.

NELLIE LAKE,

Townships of Calver and Aurora, District of Cochrane.

PATTERSON'S CREEK,

Townships of Wawanosh and Hullett, County of Huron.

PUMPHOUSE CREEK,

Townships of Hart and Cartier, District of Sudbury.

WHITEHEAD'S CREEK,

Township 67, District of Algoma.

(b) For Black Bass Propagation:

ARCAND LAKE,

Township of McBeth, District of Sudbury.

FOUR MILE LAKE,

Township of Widdifield, District of Nipissing.

GEORGIAN BAY (Portion),

(a) An area approximately 1 mile square lying west of Electric Island.

(b) An area approximately 1 mile square lying west of Lot 51, Concession VIII., Township of Harrison, District of Parry Sound.

(c) An area lying east of and extending approximately 2 miles along the shore line opposite Concessions XIII. and XIV., Township of Harrison, District of Parry Sound.

TWELVE MILE CREEK,

Townships of Nelson and Trafalgar, County of Halton.

(c) For Lake Trout Propagation,

OTTER LAKE,

Township of Foley, District of Parry Sound (Effective from the 16th day of November in each year to the 15th day of May next following).

WATER LEVELS

During the past three years, marked improvement has been shown in regard to the control of water levels. Biologically, proper control is of the greatest importance, especially when we consider that bass, maskinonge, pike, sunfish, minnows, and many other species spawn in shallow water, and that their immature stages, or adult stages, or both, live in comparatively shallow water. The fall spawning fish such as lake trout, herring, and whitefish run into comparatively shallow water and spawn on suitable shoals or grounds. The spawning depth of water for these fall spawners is much greater than that required by black bass, which is about two feet, or by minnows, which is only a few inches. The withdrawal of water from these shallows is menacing to the eggs of the spawning fish, this depending on the spawning depth and the drop in water level, but quite apart from this, the withdrawal of water from the shallows destroys myriad forms of life, for example, those of sedentary habit, those temporarily attached, the algae which harbour minute life, shellfish, and insects, and aquatic plants of various kinds.

REMOVAL OF COARSE FISH

Between December 20th and January 16th hoop nets were operated for the removal of ling from the following waters:

- (a) **In Leeds County,—**
Charleston, Grippen, Wolfe, and Otter Lakes.
- (b) **In Lanark County,—**
Tay River and Otty Lake.

The total number of ling removed from these waters was 6,520; the average weight of the ling was 7 pounds, and the total weight of ling removed was in the neighbourhood of 45,640 pounds or 22.8 tons.

Similar operations were conducted on Lake Manitou, Manitoulin Island. During the whitefish spawntaking operations in the lake 4068 pounds of ling were taken in pound nets. The average weight of each ling was approximately six pounds. Night lines were used experimentally without satisfactory results.

During the latter part of February and in March of 1938, hoop nets and gill nets were operated and 2270 pounds of ling taken. Each of these averaged four pounds in weight.

BIOLOGICAL SURVEYS

Pollution surveys were conducted on the Rainy River, Maitland River, (Goderich), and the Niagara River.

Fish planting surveys were carried out on the Holland River, Bradford, and Waterworks Pond at Richmond Hill.

Extensive surveys were conducted in connection with suitable sites for black bass rearing ponds on Manitoulin Island, Muskoka District, and Peterborough County. Surveys were also conducted in the Timiskaming District in regard to a suitable site for a trout rearing station.

With the exceptions noted above, all the work of a biological nature was concentrated on the fish cultural activities carried on in our hatcheries and rearing stations.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, conducted field investigations, coupled with laboratory studies on a number of waters in Algonquin Park during the season 1937-38, and the following is a concise account of this important work:

"One of the principal functions of this laboratory is to examine the conditions in game fish producing lakes and streams. Information obtained in this way gives a better understanding of how rapidly fish grow and how a good supply can be maintained. During 1937-38 the work was carried on in the lakes and streams of Algonquin Park.

The major studies undertaken during the year included an investigation of the vertical distribution of the young of the yellow perch in relation to their availability as food for lake trout. The food of the young perch was studied in order to learn what governed the supply of this important source of trout food. The food was found to consist of 85% *Daphnia* or water fleas, 10% small insect larvae and 5% sunfish fry.

Other studies were directed to the production of insects in the lakes and streams from the point of view of their value as food for fish.

The collection of angling statistics was continued and extended. These figures are now extensive enough to make possible a preliminary estimate of the natural productivity of the Algonquin Park lakes with respect to lake trout. They have also proven their value in following the trend of speckled trout production in Red Rock lake, and have made possible the application of measures designed to keep up production in this important lake.

During the year about 200 adult lake trout were transferred to Cache lake, some by truck and some by air, with satisfactory ease and economy. Some 2,000,000 perch fry, 100,000 lake herring fry, and some minnows were planted in Cache lake. These forage fish were introduced for the purpose of increasing the food for the bass and the lake trout."

ACKNOWLEDGMENTS

In conclusion I desire to give expression to my appreciation of the valuable assistance and co-operation rendered the Department from many sources during the year, and more particularly from the various Fish and Game Protective Associations as such and the individual members of these organizations. The sphere of activity of these Protective Associations is extending and the interest and influence of the members of these organizations and other sincere sportsmen is sufficiently evident to warrant the assertion that it is practically impossible to estimate the benefits derived by the Department therefrom in our efforts along the lines of providing an efficient administration and supervision of the wild life natural resources of this Province. Such a measure of co-operation encourages us to intensify our endeavours to preserve unimpaired and possibly improve the opportunities which exist in this Province to those who so desire to enjoy such healthy recreation which our fish and game make available.

It might also be stated that, generally speaking, members of the Staff, both the inside and outside service, have conducted themselves and performed the duties assigned to them in the best interests of the Department and its varied activities.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

Toronto, April 12th, 1939.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1937 to March 31st, 1938

LARGE-MOUTHED BLACK BASS		Carleton:	
FRY		Ottawa River	15,000
Bruce:		Rideau River	10,000
Marle Lake	5,000	Frontenac:	
Maryville Lake	10,000	Big Gull Lake	10,000
Saugeen Lake	10,000	Clear Lake (Kennebec) ..	5,000
Grey:		Fortune Lake	5,000
Mountain Lake	10,000	Long Lake (Clarendon) ..	5,000
Saugeen River	15,000	Mink Lake	5,000
Muskoka:		Pine Lake	5,000
Bass Lake	5,000	Sand Lake	5,000
Black Lake	10,000	Sharbot Lake	10,000
Wood Lake	10,000	Sunday Lake	5,000
Parry Sound:		Grenville:	
Limestone Lake	5,000	Nine Mile Reach	5,000
Little Lake	5,000	Hastings:	
Wolf River	10,000	Baptiste Lake	15,000
Simcoe:		Crow Lake	10,000
Gloucester Pool	25,000	Gunter Lake	5,000
York:		Little Salmon River	5,000
Lake Simcoe	15,000	Moirs River	10,000
		Stoco Lake	10,000
		Tongamong Lake	5,000
FINGERLINGS		Lanark:	
Durham:		Bennet's Lake	5,000
Lake Scugog	1,000	Black Lake	5,000
Haliburton:		Christie Lake	10,000
Black Lake	500	Clear Lake	5,000
Nipissing:		Dalhousie Lake	5,000
Blackwater Lake	1,000	Mississippi Lake	10,000
Norfolk:		Fagan's Lake	5,000
Little Lake	500	Otty Lake	5,000
Teeterville Pond	500	Pike Lake	5,000
York:		Leeds:	
Mary Lake	510	Beverley Lake (lower) ..	10,000
Waterworks Pond	110	Big Rideau Lake	40,000
		Charleston Lake	10,000
		Clear Lake	5,000
		Crosby Lake	5,000
		Gananoque Lake	10,000
		Grippen Lake	5,000
		Indian Lake	10,000
		Newboro Lake	5,000
		Opinicon Lake	10,000
		Sand Lake	5,000
		South Lake	5,000
		Troy Lake	5,000
ADULTS		Lennox:	
Oxford:		Lime Lake	5,000
Lakeside Lake	42	Long Lake	5,000
Maplehurst Lake	50	Slave Lake	5,000
		South Beaver Lake	5,000
SMALL-MOUTHED BLACK BASS		Muskoka:	
FRY		Beaver Lake	5,000
Bruce:		Buck Lake	5,000
Britain Lake	5,000	Clear Lake	5,000
Burford Lake	10,000	Dickie Lake	10,000
Cameron Lake	10,000	Kahshe Lake	5,000
Chesley Lake	10,000		
Gould Lake	10,000		
Isaac Lake	15,000		
Miller Lake	10,000		
Pearl Lake	5,000		
Saugeen River	15,000		
Shouldice Lake	10,000		
Silver Lake	10,000		

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SMALL-MOUTHED BLACK BASS
—Continued

Muskoka—Continued

Lake Joseph	25,000
Lake Stewart	15,000
Leech Lake	5,000
Morrison Lake	10,000
Rat Lake	5,000
Silver Lake	5,000
Wood Lake	10,000

Northumberland:

Bidy Lake	5,000
Crow Bay	5,000
Crow River	10,000
Rice Lake	15,000
Trent River	10,000

Ontario:

Lake St. John	20,000
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Parry Sound:

Balsam Lake	10,000
Bass Lake (Humphrey) ..	5,000
Bass Lake (Patterson) ..	10,000
Beaver Lake (Foley)	5,000
Blackstone Lake	10,000
Blackwater Lake	5,000
Clear Lake (Humphrey) ..	5,000
Clear Lake (Patterson) ..	5,000
Commanda Lake	10,000
Crane Lake	5,000
Crooked Lake	10,000
Deer Lake (Lount)	10,000
Deer Lake (McKenzie) ..	5,000
Diamond Lake	5,000
Horseshoe Lake	10,000
Jackson Lake	5,000
Lake Joseph	10,000
Little Long Lake	10,000
Manitowaba Lake	10,000
Mary Jane Lake	5,000
Mill Lake	10,000
Pickeral River	10,000
Rankins Lake	10,000
Restoule Lake	10,000
Ruth Lake	10,000
Sequin River	10,000
Shawanaga River	10,000
Shebeshekong Lake	5,000
Shoal Lake	5,000
Stormy Lake	5,000
Toad Lake	5,000
Trout Lake (Humphrey) ..	5,000
Turtle Lake	5,000
Whitefish Lake	5,000
Whitestone Lake	10,000
Wilson Lake	5,000
Wolf River	10,000

Peterborough:

Belmont Lake	5,000
Deer Lake (Cavendish) ..	5,000
Katchewanooka Lake	15,000
Pigeon Lake	15,000
Stony Lake	10,000

Prince Edward:

East Lake	5,000
West Lake	5,000

Simcoe:

Cook's Lake	10,000
Gloucester Pool	40,000
Kempenfeldt Bay	25,000
Little Lake (Vespra)	5,000
Park Lake (Tay)	10,000

Stormont:

Nation River	15,000
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Victoria:

Balsam Lake	25,000
Big Mud Turtle Lake	10,000
Burnt River	15,000
Cameron Lake	25,000
Dalrymple Lake	15,000
Head Lake	15,000
Little Mud Turtle Lake ..	10,000
Pigeon Lake	25,000
Round Lake	5,000
Silver Lake	10,000
Sturgeon Lake	25,000

York:

Lake Simcoe	25,000
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FINGERLINGS

Algoma:

Batchewana Bay	3,750
Dean Lake	2,000
Desbarats Lake	1,000
Gawas Bay	1,000
Gordon Lake	1,000
Goulais Bay	3,750
Harmony Bay	3,750
Haviland Bay	3,750
Keichel Lake	500
Little Basswood Lake	1,000
Otter Lake	500
Pipe Lake	500
Rock Lake	1,000
Round Lake	1,500
St. Joseph Channel	4,000
Stuart Lake	1,000

Brant:

Big Creek	1,000
Grand River	2,000
Gravel Pit at Scotland ...	800

Cochrane:

Sesekinika Lake	1,000
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Frontenac:

Cox's Lake	500
Cross Lake (Kennebec) ..	500
Cross Lake (Palmerston) .	2,000
Crow Lake	500
Dog Lake	1,000
Elbow Lake	1,000
Farm Lake	500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SMALL-MOUTHED BLACK BASS
 —Continued

Frontenac—Continued			
Horseshoe Lake	500	Devine Lake	1,000
Hotel Lake	500	Casswell Lake	1,000
Long Lake (Hinchin- brooke)	500	Clearwater Lake	1,000
Loughborough Lake	2,000	Gull Lake	1,000
Marble Lake	500	Lake McKay	1,000
Mazinaw Lake	1,000	Lake Rosseau	1,000
Mississagagon Lake	500		
Salmon River	500	Nipissing:	
Swamp Lake	500	Bear Lake	1,000
White Lake (Bedford) ...	1,000	Bruce Lake	1,000
		Cache Lake	500
Grey:		Deer Lake	500
Connell's Lake	1,000	Finlayson Lake	1,000
Francis Lake	1,000	McPhee Lake	1,000
		Muskosung Lake	500
Haliburton:		Nosbonsing Lake	500
Beech Lake	500	Talon Lake	500
Big Boskung Lake	500	Timagami Lake	1,000
Davis Lake	500	Trout Lake	2,500
Dennies Lake	500	Turtle Lake	1,500
Devils Lake	500	Wickstead Lake	1,500
Elephant Lake	1,000	Wis-Wassie Lake	500
Grass Lake	500		
Gull Lake	1,000	Oxford:	
Head Lake	1,000	Thames River	1,000
Kashagwigamog Lake ...	1,000		
Koshlong Lake	500	Parry Sound:	
Long Lake (Dudley)	500	Ahmic Lake	1,000
Long Lake (Dysart)	500	Bear Lake	2,000
Maple Lake	500	Beaver Lake (Bethune) ..	2,000
Mink Lake	500	Beaver Lake (Spence) ...	1,000
Misquahbenish Lake	500	Burden Lake	1,000
North Lake	500	Crawford Lake	1,000
Pine Lake	500	Doe Lake	2,000
Pond Lilly Lake	500	Lake Cecile	1,000
South Lake	500	Lake of Many Islands ...	1,000
West Lake	500	Little Clam Lake	1,000
West Straggle Lake	500	Little Deer Lake	1,000
		Magnetawan River	1,000
Halton:		Mogonosh Lake	1,000
Bronte River	1,000	Pickrel Lake	1,000
		Rainy Lake	2,000
Hastings:		Spring Lake	1,000
Bass Lake	500		
Moir Lake	500	Peel:	
Pine Lake	500	Credit River	2,000
Wadsworth Lake	500		
Lanark:		Peterborough:	
McGowan's Lake	500	Burleigh Falls Stream ...	500
		Chemong Lake	500
Lennox-Addington:		Clear Lake (Smith)	500
Cedar Lake	500	Clear Lake (Cavendish) .	500
Loon Lake	1,000	Crab Lake	500
Pringle Lake	1,000	Jack's Lake	500
Sheldrake Lake	500	Loon Lake	500
Varty Lake	1,000	Lovesick Lake	500
		Quarry Lake	500
Middlesex:		White Lake	500
Thames River	2,000		
Muskoka:		Simcoe:	
Bass Lake	1,000	Lake Couchiching	1,000
		Lake Simcoe	1,000
		Nottawasaga Lake	1,000
		Severn River	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SMALL-MOUTHED BLACK BASS
 —Continued

Sudbury:

Badger Lake	1,000
Bass Lake	1,000
Flood Lake	1,000
Lacloche Lake	1,000
Lake Agnew	1,000
Metagamasi Lake	1,000
Ratter Lake	500
Ted's Lake	2,000
Trout Lake (Cherriman) .	1,000

Timiskaming:

Lake Timagami	1,000
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Victoria:

Cranberry Lake	500
Hurricane Lake	500

Waterloo:

Conestoga River	2,000
Grand River	1,000
Paradise Lake	1,000

Wellington:

Puslinch Lake	1,000
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York:

Grenadier Pond	100
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YEARLINGS and ADULTS

Haldimand:

Grand River	100
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Halton:

Crawford's Lake	50
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Hastings:

Bennett Lake	85
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Kenora:

Basket Lake	81
Birch Lake	82
Black Sturgeon Lake .	80
Dogtooth Lake	81
Lawrenson's Lake	40
Long Lake	74
Longbow Lake	147
Round Lake	40

Kent:

Rondeau Bay	89
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Middlesex:

Thames River	230
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Norfolk:

Waterford Pond	100
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Oxford:

Cedar Creek	100
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Peterborough:

Stony Lake	100
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Renfrew:

Black Bay	190
Blackfish Bay	100
Bonnechere River	100
Bourgneau, or Snake Lake	102
Coldingham, or Green Lake	110
Colton Lake	108
Corry Lake	95
Devils Lake	100
Foster Lake	25
Genrick's Lake	100
Hurd's Lake	100
Hyde's Bay	85
Jack's Lake	90
Jamieson Lake	100
Kaministeg Lake	100
Lake Johnnie	96
Long Lake	100
Maskalonge Lake	96
McMaster Lake	100
Moccasin Lake	100
Muskrat River	204
Nakiks Lake (Madawaska	
River)	100
Norway Lake	100
Olmstead Lake	100
Round Lake and	
Stoney Lake	90
White Lake (McNab) .	100
White Lake (Raglan) .	100
Whitefish Lake	100

Thunder Bay:

Cloud Lake	110
Fox Lake	200
Gull Lake	145
Kashabowie Lake	100
Lac Des Mille Lacs	100
Loon Lake	110
McKay Lake	175
O'Brein Lake	180
Poulin Treble Lakes .	110
Shebandowan Lake .	150
Silver Lake	115

York:

Grenadier Pond	28
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MASKINONGE

FRY

Hastings:

Crow Lake	20,000
Crow River	10,000
Moir Lake	10,000
Moir River	5,000
Sears Lake	5,000
Stoco Lake	10,000
Whitestone Lake	10,000

Leeds:

Rideau River	10,000
St. Lawrence River .	20,000

Northumberland:

Cassidy's Bay	10,000
Crow Bay	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1937, to March 31st, 1938—Continued

MASKINONGE—Continued**Northumberland—Continued**

Crow River	10,000
Rice Lake	20,000
Trent River	40,000

Peterborough:

Belmont Lake	10,000
Buckhorn Lake	10,000
Chemong Lake	15,000
Deer Bay	15,000
Deer Lake	10,000
Katchewanooka Lake	15,000
Lovesick Lake	15,000
Otonabee River	10,000
Pigeon Lake	30,000
Round Lake	10,000
Stony Lake	15,000
Trent River	10,000

Prince Edward:

Bay of Quinte	5,000
Muscote Bay	5,700

Stormont:

St. Lawrence River	10,000
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Victoria:

Balsam Lake	10,000
Burnt River	10,000
Mill Pond	10,000
Sturgeon Lake	15,000

**PERCH
FRY**

Lake Erie	9,150,000
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**YELLOW PICKEREL (Pike-perch)
FRY**

Algoma:

Cummings Lake	150,000
Desbarats Lake	150,000
Duborne Lake	150,000
Echo Lake	418,400
Gordon Lake	200,000
Keichel Lake	400,000
Marion Lake	150,000
Mud Lake	150,000
Otter Lake	100,000
Pipe Lake	150,000
Randolph Lake	100,000
Rock Lake	200,000
Round Lake	100,000
St. Mary River	700,000

Bruce:

Berry's Lake	100,000
Chesley Lake	250,000
Gauley's Bay	500,000
Isaac Lake	250,000
Miller Lake	100,000
Sauble River	325,000
Saugeen River	625,000
Saugeen River—N. Branch	250,000

Carleton:

Ottawa River	800,000
Rideau River	400,000

Cochrane:

Bigwater Lake	200,000
Mortimer Lake	250,000
Reid Lake	250,000
Remi Lake	500,000
Unnamed lake—Fauquier Tp.	200,000
Wilson Lake	250,000

Frontenac:

Big Gull Lake	700,000
Bobs Lake	600,000
Clear Lake	200,000
Collins Bay	200,000
Cross Lake (Palmerston) .	700,000
Crotch Lake (Kennebec) .	100,000
Crow Lake	400,000
Elbow Lake	100,000
First Depot Lake	100,000
Horseshoe Lake	100,000
Little Mississagagon	100,000
Long Lake (Kennebec) ..	50,000
Long Lake (Clarendon) .	600,000
Long Lake (Portland) ...	600,000
Long Lake (Hinchin- brooke)	100,000
Mississagagon Lake	400,000
Mississippi Lake	750,000
Rideau Lake	500,000
Rock Lake	500,000
St. Lawrence River	250,000
Sharbot Lake	400,000
Sydenham Lake	250,000
Thompson Lake	100,000

Grenville:

Rideau River	1,500,000
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Grey:

Mountain Lake	250,000
Nottawasaga River	500,000

Haldimand:

Grand River	2,000,000
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Haliburton:

Paudash Lake	1,200,000
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Hastings:

Moir Lake	500,000
Moir River	750,000
Sears Lake	100,000
Stoco Lake	250,000

Kenora:

Black Sturgeon Lake	1,000,000
Eagle Lake	3,000,000
Lake of the Woods	42,985,000
Log Bay	1,750,000
Marchington Lake	1,000,000
Matheson Bay	4,800,000
Stanzikihiimi Lake	1,000,000
Wabigoon Lake	1,000,000
Willard Lake	840,000

Kent:

Rondeau Bay	250,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

YELLOW PICKEREL (Pike-Perch)
 —Continued

Lanark:

Black Lake	200,000
Christies Lake	200,000
Clear Lake	450,000
Fagan's Lake	100,000
Mississippi Lake	400,000
Otty Lake	200,000

Leeds:

Big Rideau Lake	700,000
Higley Lake	250,000
Killebeck Lake	250,000
Little Rideau Lake	150,000
Sand Lake	700,000
St. Lawrence River	1,000,000

Lennox-Addington:

Long Lake	400,000
Napanee River	2,000,000
South Beaver Lake	400,000
White Lake	400,000

Manitoulin:

Fraser Bay	2,000,000
Lake Helen	1,000,000
Linda Lake	500,000
MacGregor Bay, & Bay Finn	4,000,000

Muskoka:

Allen's Lake	100,000
Bala Bay	500,000
Bass Lake	50,000
Brandy Lake	200,000
Buck Lake	200,000
Kahshe Lake	300,000
Lake Rosseau	1,300,000
Muskoka River	500,000
Musquash River	500,000
Six Mile Lake	500,000
Sparrow Lake	*2,000,000
Three Mile Lake	500,000

Nipissing:

Bruce Lake	100,000
Finlayson Lake	100,000
Herridge Lake	100,000
Jumping Caribou Lake ..	250,000
Lake Chebogamog	100,000
Lake Nosbonsing	250,000
Lake Temagami	500,000
Marion Lake	250,000
Martin Lake	250,000
McPhee Lake	100,000
Olive Lake	100,000
Red Cedar Lake	250,000
Talon Lake	250,000
Tilden Lake	100,000
Tomiko Lake	250,000
Wickstead Lake	250,000
Wilson Lake	100,000
Wis-Wassie Lake	250,000

Norfolk:

Waterford, or Nanticoke Creek	250,000
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Northumberland:

Rice Lake	1,200,000
Trent River	3,250,000

Ontario:

Lake St. John	250,000
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Oxford:

Lakeside Lake	500,000
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Parry Sound:

Ahmic Lake	500,000
Bass Lake	150,000
Blackstone Lake	100,000
Burden Lake	500,000
Clear Lake	250,000
Commanda Lake	200,000
Crane Lake	200,000
Crawford Lake	100,000
Crooked Lake	250,000
Deer Lake	250,000
Doe Lake	300,000
French River	1,000,000
Horseshoe Lake	150,000
Isabella Lake	200,000
Jack's Lake	50,000
Lake Joseph	300,000
Lake Rosseau	1,000,000
Little Long Lake	100,000
Long Lake	250,000
Magnetawan River	500,000
Manitowaba Lake	150,000
McKeown Lake	100,000
Mill Lake	150,000
Otter Lake	300,000
Owl Lake	100,000
Pickering River	150,000
Restoule Lake	200,000
Sequin River	250,000
Shawanaga Lake	250,000
Shebeshekong Lake	150,000
Shoal Lake	150,000
Stewart Lake	100,000
Stormy Lake	200,000
Whitestone Lake	250,000
Wolf River	250,000

Peterborough:

Little Lake	250,000
Otonabee River	1,200,000
Rice Lake	1,200,000
Trent River	600,000

Prince Edward:

Bay of Quinte	5,200,000
Consecon Lake	600,000
East Lake	600,000
West Lake	500,000

Rainy River:

Beaverhouse Lake	2,000,000
Clearwater Lake	2,000,000
Off Lake	1,000,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

YELLOW PICKEREL (Pike-Perch)

—Continued

Rainy River—Continued

One Sided Lake	1,000,000
Quill Lake	2,000,000
Rainy Lake	65,000,000
Sabaskong Bay	3,000,000
Windigoostigwam Lake ..	1,000,000

Russell:

Castor River	1,000,000
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Simcoe:

Gloucester Pool	1,250,000
Little Lake	500,000
Sturgeon Bay	1,000,000

Stormont:

Nation River	500,000
St. Lawrence River	2,400,000

Sudbury:

Birch Lake	150,000
Charlton Lake	250,000
Cranberry Lake	500,000
Frood Lake	250,000
Ivanhoe Lake	250,000
Lacloche Lake	300,000
Lake Penage	3,000,000
Mattagamasi Lake	200,000
McLaren Lake	300,000
Ramsay Lake	1,000,000
Wanapitei Lake	1,000,000
Whitefish Falls Bay & River	5,000,000
Wolseley Bay	500,000
Unnamed Lake	200,000

Thunder Bay:

Baril Lake	1,000,000
Cordingley Lake	500,000
Lake of Flats	200,000
Lake Shebandowan	2,000,000
Savant Lake	1,000,000
Thunder Bay	1,500,000

Timiskaming:

Granite Lake	250,000
Lady Evelyn Lake	250,000
Lake Timagami	500,000
Lake Timiskaming	500,000
Net Lake	250,000
Rib Lake	200,000
Sesekinika Lake	500,000
Twin Lake	250,000

Victoria:

Lake Dalrymple	500,000
Young's Lake	250,000

Great Lakes:

Lake Superior	1,000,000
North Channel	4,000,000
Lake Huron	22,750,000
Lake Ontario	750,000

*Eyed eggs supplied, and planted as fry
 from Sparrow Lake hatchery.

BLUE PICKEREL

FRY

Essex:

Lake Erie	1,000,000
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BROWN TROUT

YEARLINGS

Brant:

Branch Creek	1,000
Whiteman's Creek	1,000

Bruce:

Crane River	1,200
Saugeen River	2,300
Sucker Creek	1,000
Vogt's Creek	1,500

Carleton:

Mississippi River	3,000
Rideau River	1,200

Durham:

Baldwin Creek	1,200
Baxter Creek	1,500
Cavan Stream	2,400

Elgin:

Big Creek	2,200
Little Otter	4,000

Frontenac:

Clyde River	1,500
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Grey:

Big Head River	3,000
Maxwell's Creek	1,200
Potawatami River	1,000
Saugeen River	8,000
Styx River	3,000
Sydenham River	3,900
Weatherspoon Creek	500

Haldimand:

Rogers Creek	1,000
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Halton:

Bronte River	2,200
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Hastings:

Beaver Creek	1,000
Black Creek	1,200
Little Mississippi River ..	1,200
Rawdon Creek	2,000

Huron:

Nine Mile River	1,100
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Lanark:

Mississippi River	3,000
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Middlesex:

Medway Creek	1,200
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1937, to March 31st, 1938—Continued

BROWN TROUT—Continued

Muskoka:	
Indian River	1,200
Kahshe River	800
Norfolk:	
Big Creek	1,000
Nanticoke Creek	1,500
Northumberland:	
Bowens Pond	1,200
Glenfurnte Stream	4,600
Oxford:	
Horner's Creek	600
Whiteman Creek	1,500
Perth:	
Halfway Stream	1,100
Upper Avon River	1,100
Peterborough:	
Deer Bay Creek	3,000
Dickson's Creek	1,500
Eel's Creek	1,000
Lower Cavan Creek	600
Mississauga River	1,500
Nogies Creek	1,500
Simcoe:	
Nottawasaga River and tributaries	6,874
Waterloo:	
Alderside Pond	600
Bridgeport Dam	500
Dentinger Creek	1,000
Wellington:	
Gerrie Creek	600
Speed River	1,200
York:	
Humber River	3,000
Private waters (Sale) ...	510

LAKE TROUT**FRY**

Frontenac:	
Buckshot Lake	20,000
Crotch Lake	25,000
Crow Lake	25,000
Desert Lake	15,000
Dog Lake	20,000
Grindstone Lake	10,000
Knowlton Lake	10,000
Long Lake	15,000
Loughborough Lake	45,000
Mackie Lake	10,000
Mississagagon Lake	15,000
Reid's Lake	10,000
Sand Lake	5,000
Schooner Lake	15,000

Sharbot Lake	25,000
Wolf Lake	10,000
Hastings:	
Baptiste Lake	35,000
Bass Lake	10,000
Big Salmon Lake	25,000
Cedar Lake	10,000
Devil Lake	10,000
Dickey Lake	20,000
Eagle Lake	10,000
Gunter Lake	10,000
Jamieson Lake	10,000
Johns Lake	10,000
Lake Papineau	25,000
Lake St. Peter	25,000
L'Amable Lake	10,000
Little Bass Lake	10,000
Little Salmon Lake	10,000
Little Weslemkoon Lake ..	10,000
Long Lake (Mayo)	10,000
Long Lake (Dungannon) ..	10,000
Quinlan Lake	10,000
Wadsworth Lake	10,000
Weslemkoon Lake	15,000
Lanark:	
Silver Lake	15,000
Leeds:	
Big Rideau Lake	50,000
Charleston Lake	60,000
Clear Lake	10,000
Indian Lake	10,000
Red Horse Lake	15,000
Lennox-Addington:	
Bark Lake	10,000
Big Lake	20,000
Burns Lake	10,000
Finch Lake	10,000
Little Cedar Lake	10,000
Loon Lake	30,000
Mazinaw Lake	5,000
Otter Lake	20,000
Spring Lake	10,000

Peterborough:

Catchacoma Lake	10,000
Gull Lake	10,000
Jack's Lake	25,000
Long Lake	10,000
Loon Lake	20,000
Sandy Lake	10,000
Towens Lake	5,000
Trout Lake	10,000
West Lake	5,000

Great Lakes:

Lake Superior	1,800,000
North Channel	550,000
Lake Huron	1,000,000
Lake Ontario	357,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

LAKE TROUT—Continued**FINGERLINGS****Algoma:**

Achigan Lake	6,000
Axe Lake	11,000
Basswood Lake	6,000
Chiblow Lake	6,000
Clear Lake	18,000
Constin, or Trout Lake ..	6,000
Cumming Lake	6,000
Duborne Lake	6,000
Grey Trout Lake	6,000
Havilah Lake	6,000
Hawk Lake	5,750
Hobon Lake	5,750
Huston Lake	10,750
Island Lake	6,000
Long Lake	6,000
Loon Lake (Deroche)	6,000
Loon Lake (Borden)	6,000
Matinenda Lake	6,000
Mud Lake	6,000
Patton Lake	6,000
Petanguin Lake	6,000
Pickernel Lake	6,000
Rainbow Lake	6,000
Rand Lake	6,000
Raw Hide Lake	6,000
Red Deer Lake	6,000
Sand Lake	6,000
Stuart Lake	6,000
Tookenay Lake	6,000
Trout Lake (Aweres)	6,000
Trout Lake (24-12)	6,000
Upper Island Lake	6,000

Bruce:

Dyer Bay	15,000
Gillies Lake	15,000

Cochrane:

Nellie Lake	6,000
Perry Lake	6,000
Watabeag Lake	6,000

Frontenac:

Crotch Lake	5,000
Desert Lake	5,000
Dog Lake	5,000
Eagle Lake	5,000
Loughborough Lake	5,000
Lucky Lake	10,000
Sharbot Lake	5,000

Haliburton:

Bear Lake (Guilford)	5,000
Bear Lake (Glamorgan) ..	5,000
Big Boskung Lake	10,000
Davis Lake	5,000
Deer Lake	5,000
Drag Lake	10,000
Eagle Lake	10,000
East Lake	5,000
Gull Lake	10,000
Haliburton Lake	10,000
Hawke Lake	5,000

Hollow Lake	10,000
Horseshoe Lake	5,000
Hurricane Lake	5,000
Kashagawigamog Lake ...	5,000
Kingscote Lake	5,000
Kushog Lake	10,000
Little Boskung Lake	5,000
Long Lake	5,000
Maple Lake	5,000
Moose Lake	5,000
Mountain Lake	5,000
Oblong Lake	5,000
Pine Lake	5,000
Redstone Lake	10,000
Ross's Lake	5,000
South Bay	5,000
Stormy Lake	5,000
Twelve Mile Lake	5,000

Hastings:

Clear Lake	5,000
Lake of Islands	5,000
LaValley Lake	5,000
Long Lake (Lutterworth) ..	5,000
Papineau Lake	5,000
Robinson Lake	5,000
Trout Lake (Faraday) ..	5,000

Kenora:

Bigstone Bay	40,000
Blue Lake	25,000
Boulder Dam	50,000
Clearwater Bay	90,000
Cul de Sac Lake	25,000
Dogtooth Lake	50,000
Eagle Lake	100,000
Gibbi Lake	50,000
Granite Lake	25,000
Lake of the Woods	72,000
Little Vermilion Lake ...	50,000
Rice Lake	10,000
Silver Lake	25,000
Thunder Lake	25,000
Trout Lake	25,000
Whitefish Bay	90,000
Willard Lake	35,000

Lanark:

Rideau Lake	2,000
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Lennox-Addington:

Thirty Island Lake	5,000
White Lake	2,000

Manitoulin:

Fraser Bay	25,000
Lake Manitou	33,000

Muskoka:

Bala Bay	15,000
Bella Lake	5,000
Clear Lake	5,000
Fairy Lake & tributaries ..	5,000
Lake of Bays & tributaries	28,000
Long Lake	5,000
Muskoka Lake	15,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

LAKE TROUT—Continued**Muskoka—Continued**

Oxtongue Lake	5,000
Peninsula Lake & tributaries	15,000
Rebecca Lake	5,000
Rosseau Lake	27,000
Skeleton Lake	10,000
Trout Lake (Watt)	5,000
Vernon Lake	15,000
Waseosa Lake	5,000

Nipissing:

Aylen Lake	5,000
Martin Lake	6,000
Red Cedar Lake	6,000
Source Lake	10,000
Trout Lake	6,000

Parry Sound:

Bay Lake	10,000
Bella Lake (Ferguson) ..	5,000
Bernard Lake	10,000
Big Clam Lake	5,000
Clear Lake (Humphrey) ..	7,500
Clear Lake (Perry)	10,000
Five Mile Bay	2,000
Horn Lake	15,000
Lake Joseph	5,000
Lorimer Lake	15,000
Maple Lake	10,000
Otter Lake	10,000
Portage Lake	5,000
Round Lake	5,000
Salmon Lake	10,000
Sand Lake	10,000
Spring Lake	10,000
Sucker Lake	5,000
Sugar Lake	10,000
Tea Lake	5,000
Three Legged Lake	10,000
Whitefish Lake	7,500

Renfrew:

Bark Lake	6,000
Blackfish Bay	5,000
Bradley Lake	10,000
Carson Lake	6,000
Clear Lake	5,000
Cross Lake	6,000
Diamond Lake	5,000
Kaministeg Lake	5,000
Long Lake	5,000
Pog Lake	6,000
Round Lake	6,000
Trout Lake	6,000
Wadsworth Lake	6,000

Simcoe:

Kempenfeldt Bay	20,000
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Sudbury:

Ella Lake	6,000
Long Lake (Broder)	6,000
Long Lake (Harrow)	6,000
Nelson Lake	6,000
Penage Lake	6,000

Ramsay Lake	6,000
Trout Lake	6,000
Wanapitae Lake	6,000
Windy Lake	6,000

Thunder Bay:

Baril Bay	50,000
Brown Lake	50,000
Jarvis Bay	50,000
Lac Des Mille Lacs	50,000
Lake Nipigon	50,000
McKenzie Lake	50,000
Surprise Lake	10,000
Twin Lakes	50,000
Wawon Lake	25,000

Timiskaming:

Bartle Lake	6,000
Lake Timagami	6,000
Lake Timiskaming	6,000
Net Lake	6,000
Rib Lake	6,000
Trout Lake	6,000
Twin Lake	6,000

York:

Lake Simcoe	40,000
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Great Lakes:

Lake Superior	3,675,000
North Channel	250,000
Georgian Bay	3,933,000
Lake Huron	5,501,100
Lake Ontario	50,000

EYED EGGS

Exchange	3,225,000
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ATLANTIC SALMON**FRY**

For demonstration purposes	7,200
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KAMLOOPS TROUT**FINGERLINGS****Bruce:**

Gillies Lake	20,000
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Grey:

Bass Lake	20,000
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Muskoka:

Echo Lake	20,000
Waseosa Lake	20,000

RAINBOW TROUT**FINGERLINGS****Algoma:**

Clear Lake	5,000
Garden River	5,000
Mississagi River	5,000
St. Mary River	2,000
White River	6,440

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

RAINBOW TROUT—Continued

Bruce:	
Sauble River	10,000
Dufferin:	
Nottawasaga River	7,000
Elgin:	
St. Thomas City Reservoir	5,000
Grey:	
Sheppard's Lake	10,600
Haliburton:	
Burnt Lake	5,000
McFadden's Lake	5,000
Muskoka:	
Indian River	7,000
Long Lake	3,000
Norfolk:	
Patterson's Creek	3,000
Simcoe:	
Coldwater River	3,600
Kempfenfeldt Bay	7,000
Sturgeon River	3,600
Sudbury:	
Unnamed lake	4,000
York:	
Humber River	5,000
Private Waters (Sale) ...	3,000

SPECKLED TROUT
FINGERLINGS

Algoma:	
Aubinadong Lake	8,500
Batchewana River	5,000
Big Bear Lake	10,000
Blue Lake	15,000
Camp 12 Lake	8,500
Canoe Lake	10,000
Caribou Lake	15,000
Carp River	3,000
Chippewa River	5,000
Christman Lake	5,000
Deer Lake	4,000
Horseshoe Lake	1,500
Iron River	3,000
Island Lake (176)	4,000
Jobammeghia Lake	2,000
Kashawong Lake	3,000
Kawagama River	4,000
Laughing Lake	7,000
Loon Lake (Deroche) ...	7,000
Lower Island Lake	1,600
Mashagami Lake	10,000
Moose Lake	400
Pancake River	5,000
Quinn Lake	100
Ranger Lake	8,500
Reserve Lake	10,000

Root River	2,400
Saddle Lake	1,000
Speckled Trout Lake (176)	1,000
Speckled Trout Creek ...	600
Trout Lake (Aweres)	2,000
Twin Lake	7,000
Upper Island Lake	1,600
Wartz Lake	5,000
Weashkog Lake	10,000
White River	8,000

Cochrane:

Charlebois Lake	500
Croft Creek	600
Dalton's Lake	500
Dandurand Creek	800
Fuller Creek	500
Grassy River	500
Lake of Bays	800
Legare Creek	800
McIntyre Lake	500
Metagami River	500
Ramsbottom Creek	500
Red Sucker River	500
Rowley Lake	800
Shaw's Creek	400
Waterhen Creek	500
Wealthy Creek	500

Norfolk:

Vittoria Creek	100
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Renfrew:

Nadeau Creek	175
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Thunder Bay:

Allen Lake	6,000
Blend River	8,000
Cedar Creek	11,000
Cummings Lake	12,000
Current River	24,000
Hilma Lake	2,000
Johnston Lake	2,000
Kaministiquia River	10,000
Lenora Lake	6,000
Lesage Lake	5,000
Lower Pass Lake	4,500
McIntyre River	10,000
McKenzie River	9,000
Mount Stephen Lake	6,000
Neebing River	12,000
North Enders Lake	6,000
Ozone Waters	12,000
Partridge Lake	5,000
Pitch Creek	14,000
Trout Creek	12,000
Whitewood Creek	3,000

Timiskaming:

Small Spot Creek	800
Private waters (Sale) ...	250

YEARLINGS**Algoma:**

Achigan Lake	2,000
Achigan Creek	3,000
Agawa River	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued

Algoma—Continued

Alva Lake	1,000	Michipicoten River	6,000
Anjigami Creek	2,000	Mile 58 Lake	1,000
Appleby Lake	2,000	Miltelm Lake	1,000
Arnill Lake	1,500	Mongoose Lake	2,000
Aubinadong Lake	1,000	Moose Lake (25 R.13) ...	2,000
Aweres Lake	4,000	Mountain Lake	500
Bamagesic Lake	2,000	Mud Lake	2,500
Basswood Lake	2,000	Ned's Lake	1,500
Batchewana River	8,000	Patton Lake	2,000
Bellevue Creek	1,500	Pine Lake (24-R-13)	2,000
Boyles Creek	2,000	Pine Lake (U.)	500
Bridgeland River	4,000	Pine Lake (25-R-11), or	
Burrows Lake	2,000	Prugh	2,000
Caldwell Lake	500	Pinkney Lake	1,000
Camp Lake	1,500	Rand Lake	2,000
Camp 8 Creek	1,000	Ranger Lake	1,500
Capp Lake	1,000	Reserve Dam Creek	1,000
Caribou Lake	2,000	Richardson Creek	1,500
Chiblow Lake	2,000	Rock Lake	1,000
Chippewa River	4,000	Root River	7,000
Chub Lake	4,000	Round Lake (Grassett) ..	1,500
Clear Lake (Aweres)	2,000	Round Lake (1 A.)	500
Clear Lake Creek (Scarfe) ..	1,000	St. Mary River	1,000
Corston Lake	1,500	Sand Lake Creek	2,000
Dam Creek	1,000	Sand River	2,000
Dam Lake	4,000	Sausabic Lake	1,500
Deer Lake	2,000	Scarbo Lake	1,000
Devil Lake	1,000	Silver Creek	7,000
Diamond Lake	3,000	Sister Lake No. 1	500
Driving Creek	3,000	Sister Lake No. 2	500
Emerald Lake	1,500	Speckled Trout Lake	
Foot Lake	2,000	(1 A.)	2,000
Franklin Lake	1,500	Speckled Trout Lake	
Garden Lake	1,000	(176)	1,500
Garden River	7,000	Speckled Trout Lake	
Goodwin Lake	2,000	(28-R-16)	500
Goulais River	3,000	Spruce Lake	1,500
Green Lake	1,500	Sucker Lake	2,000
Harmony River	1,500	Summit Lake	2,000
Hawk Lake	2,000	Tamarack Lake	500
Hoath, or Heydon Lake ..	1,000	Tawabinasay Lake	2,000
Hobon Lake	2,000	Tea Lake	2,500
Hubert Lake	2,000	Triple Lake	1,000
Island Lake (Aberdeen) ..	1,500	Trout Lake (62)	2,000
Island Lake (176)	2,000	Trout Lake (167)	1,000
Jobammeghia Lake	3,200	Trout Lake (Aweres) ...	3,000
Kennedy Lake	1,500	Trout Lake Inlet	500
Kinoch Lake	1,500	Twin Lakes	5,000
Laughing Lake	3,000	Two Tree River	1,500
Little Blind River	1,000	Upper Island Lake	7,000
Little White River	5,000	Wallace Lake	500
Lonely Lake	2,000	Wartz Lake	2,000
Long Lake (Jarvis)	1,000	Waterhole Lake	2,000
Long Lake (Meredith) ..	3,000	Wawa Lake	2,000
Loon Lake (Deroche) ...	3,000	White River	1,000
Loon Lake (24 R.13)	2,000	Whitehead's Creek	1,500
Loon Lake (Kirkwood) ..	4,000		
Loonskin Lake	2,000	Brant:	
Lower Island Lake	7,000	Moody and Lyons Creek ..	200
Mashagami Lake	1,500		
McCormick Lake	4,000	Bruce:	
McCrea Lake	1,500	Big Bay Swamp	300
McGill Creek	1,000	Colpoj Creek	450
McGrath Creek	2,000	French Bay Creek	450
McKinnon Creek	1,500	Hill's Spring	450
McVeigh Creek	1,500	Judge's Creek	3,900
		Nine Mile River	1,800
		Pettigrew Spring	450
		Sauble River	900

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued

Bruce—Continued

Sharp's Spring	1,350
Silver Creek	1,000
Spring Creek (Amabel) ..	1,800
Spring Creek (Carrick) ..	900
Stream entering into	
Paddis Bay	200
Tucker's Spring	900
Vance's Creek	450
Willow Creek	800
Wilson Creek	450

Cochrane:

Liniment Lake	150
Morgan Lake	150
Sesekinika Creek	200

Dufferin:

Boyle's Creek	500
Cemetery Creek	200
Credit River	3,100
Grand River	1,800
Nottawasaga River	2,700
Pine River	1,800
Sanderson Creek	200

Durham:

Ard's Creek	200
Austin's Creek	500
Barton's Creek	100
Beatty Creek	200
Brook's Creek	500
Burk's Pond	1,000
Cain's Stream	1,400
Carscadden Creek	200
Cowper's Creek	200
DeLong's Stream	400
Drew's Creek	200
Goodman's Creek	500
Graham's Creek	100
Harris Creek	200
Hayden's Creek	2,500
Luxton Creek	500
McKindley's Creek	1,000
McLaughlin's Creek	500
Mercer's Creek	200
Miller Creek	500
Muldrew's Creek	100
Orono Park Pond	500
Patterson's Creek	500
Patton's Stream	100
Powell's Creek	200
Quantreuil's Creek	200
Rowe's Pond	200
Sowden's Creek	200
Sowper's Creek	200
Stream at Manvers	1,500
Strong's Creek	100
Thompson's Creek	200

Elgin:

Ball Creek	1,500
Bassell Creek	500
Beaver Creek	500
Buck Creek	250
Campbell Creek	500
Clear Creek	3,000

Deer Creek	500
Eckert Creek	500
Godwillie Creek	500
Grange Hall Creek	500
Howey Creek	500
Leitch Creek	500
Matthews Creek	500
Sisken Creek	500
Venison Creek	3,000
Wolfe Creek	500

Frontenac:

Black Creek	2,400
Camp Lake	2,400
Grindstone Lake	4,800
Knowlton Lake	500
Lucky Lake	250
Sharbot Creek	250
Spring Creek entering	
Buckshot Lake	500
Trout Lake	500

Grey:

Beatty Saugeen River	3,600
Beaver River	7,800
Beirness Stream	250
Bell's Lake	2,700
Big Head River	1,800
Boyd's Lake	1,800
Boyne River	2,700
Caseman Creek	900
Christies Creek	1,800
Cook's Creek	500
Deer Creek	1,800
English Lake	2,700
Esplen Pond	900
Eugenia Pond	7,400
Ewart's Lake	1,800
Fairbairn Creek	1,800
Ferguson Creek	1,800
Finn's Creek	450
Firth's Creek	2,400
Glen Creek	2,700
Grand River	500
Lawrence Creek	1,350
Manx Creek	900
McCartney's Lake	1,800
McConnell Creek	1,000
Meino Creek	1,800
Miller Creek	1,000
Mitchell's Mill Stream ...	1,800
Mountain Lake	500
Munshaw Lake	1,800
Nigger Creek	2,500
Oxenden Creek	3,000
Pearce Creek	250
Penner's Creek	450
Riley Creek	250
Rob Roy Creek	1,800
Saugeen River	5,400
Spey River	2,700
Sulphur Springs	200
Sydenham River	3,100
Unnamed Creek	
(Egremont)	900
Wilcox Lake	900
Williams Spring	3,700

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued**Haliburton:**

Bear Lake (Livingstone) .	250
Bitter Lake	250
Blue Lake	250
Burnt River	1,200
Catchacoma Lake	600
Diamond Lake	400
Drag River	750
Eagle Lake	500
Fletcher Lake	2,950
Glidden Creek	900
Holland Creek	250
Hollow Lake	2,700
Hurricane Lake	500
Kimball Lake	250
Millichamp Lake	900
Moon's Creek	1,200
Oblong River	1,400
Otter Lake	900
Partridge Lake	250
Poverty Lake	900
Raven Lake	1,800
Redstone River	500
Round Lake	250
Slipper Lake	250

Halton:

Crawford Lake	900
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Hastings:

Alexander Creek	1,000
Bartlett Creek	4,400
Brett's Lake	3,400
Carleton Creek	500
Cedar Creek	4,800
Deer River	2,000
Diamond Lake	1,000
East Lake	500
Echo Lake	4,800
Egan Creek	3,400
Foster's Lake	500
Fraser's Creek	1,500
Geen's Creek	1,500
Gin Creek	500
Hinze's Lake	2,400
Horse Lake	500
Little Mississippi Lake	500
Little Papineau Lake	1,200
McCormick Lake	3,600
Mud Turtle Lake	500
Nobs Lake	500
Peel's Lake	1,000
Rawdon Creek	4,800
Shaw Lake	500
Shire Creek	3,400
Spurr Lake	1,400
Squire's Creek	4,800
Vanderbeck Lake	4,800
Waterhouse Lake	4,800
York River	500

Huron:

Patterson's Creek	3,000
Porter's Creek	1,500
St. Helen's Creek	250
Wilson's Creek	900

Kenora:

Raleigh Creek	1,500
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Lanark:

Clyde River	4,800
Paul's Creek	4,800

Lennox-Addington:

Beaver Creek	4,800
Big Lake	2,400
Burns Lake	250
Graham's Lake	2,400
Green Lake	1,000
Hyde's Creek	4,800
Little Long Lake	250
Rainy Lake	2,400
Rock Lake	250
Ruttan's Lake	2,400
Shiner Lake Creek	250
Smith's Lake	250
Snake Creek	500
Thirty Island Creek	250
Unnamed stream (Denbigh)	250
White Lake	250
Yeoman's Creek	250

Manitoulin:

Blue Jay Creek	1,500
Harris Creek	1,500
Mindemoya River	1,500

Middlesex:

Cody Creek	2,190
Stream—C.13 lot 31 London Tp.	500
Wye Creek	1,000

Muskoka:

Big East River	9,000
Bigwind Lake	900
Bird Lake	900
Black Creek	2,000
Boyne Creek	2,000
Clear Lake (Sinclair)	1,200
Clear Lake (Oakley)	900
Creeks running into Fairy Lake	4,000
Creeks running into Peninsula Lake	4,000
Creeks running into Muskoka River	6,000
Creeks running into Vernon Lake	4,000
Eastails Lake	900
Echo Lake	2,700
Fox Lake	3,000
Fraser's Lake	900
High Lake	900
Jessups Creek	2,000
Lake Joseph	2,800
Lake of Bays	5,400
Lake Rosseau	2,000
Little Clear Lake	600
Little East River	3,000
Long Lake (Cardwell)	1,105
Long Lake (Franklin)	900

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued**Muskoka—Continued**

Long Lake (Ridout)	900
Loon Lake	900
Loon Lake Creek	350
Martin Lake	900
McReynold's Lake	900
Monahan Lake	900
Muskoka Lake	1,500
Muskoka River	3,000
Oxtongue Lake	900
Oxtongue River	3,000
Pine Lake	900
Poverty Lake	900
Rebecca Lake	1,350
Rill Lake	1,055
Shoe Lake	900
Skeleton Lake	2,500
Split Rock Lake	900
Tooke's Lake	1,055
Wolf Lake	900

Nipissing:

Boat Lake	600
Bourdeaux Lake	300
Cedar Lake	250
Clear Lake (Lyell)	500
Clear Lake (Gooderham)	500
Crooked Lake	100
Frog Lake	500
Gorge Lake	100
Hoover's Lake	900
Little Madawaska River	500
Little Tyne River	100
Long Lake	600
Magnetawan River	200
McNorton Lake	800
Montreuil Lake	500
Nelson's Lake	900
North River	1,000
Red Rock Lake	200
Rocky Lake	500
Rowan Lake	150
Unnamed stream running into McPhee Lake	500
White Lake	150

Norfolk:

Big Creek	1,500
Forestville Creek	1,250
Hay Creek	1,150
Kent Creek	1,500
Nanticoke Creek	1,250
Vittoria Creek	10
Winter's Creek	1,100

Northumberland:

Big Creek	500
Biltmore Creek	3,000
Black's Creek	3,000
Burnley Creek	6,000
Chidley's Creek	100
Dartford Creek	3,000
Dawson's Creek	1,500
DeLong's Creek	500
Duncan's Creek	1,500
Heffernan's Creek	1,000
Little Cole Creek	1,000

Mayhew's Creek	500
O'Grady's Creek	1,500
Pegnan's Creek	2,000
Piper's Creek	100
Quinn's Creek	1,000
Robin's Creek	200
Sandy Flats Creek	2,000
Spring Creek	300
Taylor's Creek	500
Trout Creek	3,000
Valleau Creek	1,000

Ontario:

Black Creek	1,000
Electric Light Pond	500
Elgin Park Pond	500

Parry Sound:

Barrett's Creek	1,000
Bear Lake	200
Beatty Creek	1,250
Begsboro Creek	2,500
Big Clam Lake	200
Birch Lake	1,250
Black Creek (Strong)	2,500
Black Creek (Gurd)	1,250
Cashman's Creek	200
Clear Lake (S. Himsworth)	500
Clear Lake (Perry)	1,800
Clear Lake (Wilson)	125
Clear Lake (Armour)	200
Commanda Creek	2,500
Compass Lake	360
Cummings Lake	250
Deer River (Lount)	450
Distress River	1,250
Dunkers Creek	1,250
Eagle Lake	125
Genesee Creek	3,000
Horne Lake	200
James Creek	360
King Lake	125
Little Lake	100
Little East River	900
Little Pickerel River	125
Long Lake	900
Lynx Lake	400
Magnetawan River	4,310
Owl Lake	200
Pine Lake	100
Ragged Creek	360
Rat Lake	360
Reasin Lake	200
Rock Lake	200
Russell's Creek	1,250
Ryan's Creek	400
Shadow River	1,200
Shell's Lake	100
South River	2,500
Stellar Creek	1,250
Stirling River	1,000
Stoney Lake	500
Three Mile Lake	200
Trout Creek	1,350
Tug-of-War Creek	200

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued			
Peel:		Anderson Lake	
Caledon Lake	1,000	(St. Ignace)	1,500
Credit River	1,900	Arrow River	2,000
Temple Stream	500	Bass Creek	4,000
Perth:		Bat Lake	2,000
Avon River	3,000	Beaver Lake	2,000
Peterborough:		Bertha Lake	1,000
Big Ouse River	5,000	Big Duck River	4,000
Buchanan Creek	1,000	Big MacKenzie River	14,000
Cavan Stream	3,000	Boulevard Lake	3,000
Little Ouse	6,000	Bruley Creek	7,000
Mount Pleasant	1,000	Camp Lake	4,000
Trennum's Creek	1,500	Cedar Creek	11,000
Renfrew:		Centre Lake	1,000
Battery Lake	1,000	Coldwater River	3,000
Black Lake	500	Corbett Creek	5,000
Carson Lake	1,000	Cousineau Lake	1,000
Colton Lake	500	Crockers Lake	1,500
Dam Lake	1,000	Current River	14,000
Eady's Lake	500	Deception Lake	7,000
Foy's Creek	1,000	Echo Lake	3,000
Godin's Lake	500	Fall Lake	3,000
Johnson Lake	1,250	Fawn Lake	1,500
Loche Lake, or		Five Mile Lake	1,500
Goshen Creek	2,000	Fog Lake	2,000
Long Lake	1,250	High Bluff Lake	500
MacKay Creek	1,200	Hogan Lake	1,500
Nadeau Creek	700	Kaministiquia River	7,000
Paddy's Lake	2,500	Kowkash River	1,500
Rock Lake	500	Langley's Lake	2,500
Round Lake	500	Little MacKenzie River ..	2,000
Schooner Lake	1,250	Little Lake	1,000
Smith Lake	500	Little Whitefish River ...	2,000
Snake Lake	1,250	Loftquist Lake	14,000
Spring Creek	1,000	Loon Creek	1,500
Trout Lake	1,000	Loon Lake	3,000
Turner Creek	170	Loon River	5,000
Wylie Creek	1,800	Lower Pearl River	2,000
Simcoe:		Lower Hunter Lake	1,500
Black Creek	300	Mac's Lake	1,000
Boyne River	1,200	Maxwell Creek	1,500
Corbett Creek	1,800	McIntyre River	7,000
Greenlaw Pond	100	McGregor Lake	1,000
Mathewson's Creek	1,200	McVicar Creek	3,000
Sheldon Creek	3,000	Mirror Lake	1,500
Silver Creek	2,000	Missed Lake	1,500
Sturgeon River	7,000	Moose Lake	
Tenth Creek	500	(near Rossport)	1,500
Willow Creek	1,200	Moose Lake	
Sudbury:		(McTavish Tp.)	3,000
Bertrand Creek	1,200	Morgan Creek	1,500
Ella Lake	1,050	Neebing River	7,000
Pumphouse Creek	1,000	Nipigon River	28,000
Sauble River	1,500	Oliver Lake	7,000
Shiner Lake	1,000	Paquette Lake	2,500
Thunder Bay:		Pass Lake	7,000
Allen Creek	1,000	Paysplatt River	3,000
Anderson Creek	1,500	Pearl River	2,000
Anderson Lake (McTavish)	1,462	Pickerel Lake	2,500
		Pitch Creek	7,000
		Raft Lake	2,000
		Randolph Creek	500
		Rock Lake	1,500
		Rock River	5,000
		Round Lake	1,000
		Samec Lake	1,000
		Sand Lake	2,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1937, to March 31st, 1938—Continued

SPECKLED TROUT—Continued**Wentworth:****Thunder Bay—Continued**

Sand Lake (near Schreiber)	1,500
Silver Lake	900
Silver Islet Creek	1,
Skillen Lake	2,000
Spectacle Lake	2,000
Spring Creek (Dorion) ..	2,000
Spring Creek No. 1	2,500
Spring Creek No. 2	2,500
Spring Lake (Adrian) ...	1,000
Squaw Creek	4,000
Trap Lake	1,000
Trout Lake (Gorham) ...	7,000
Trout Lake (Stirling) ...	12,500
Upper Hunter Lake	1,500
Upper Pearl Lake	2,000
Wanogi Lake Creek	7,000
Walker Lake	2,000
Welch Lake	1,000
White Sand Creek	6,500
Whitewood Creek	7,000
Wideman Lake	1,500
Wolf River	3,000

Timiskaming:

Bartle Lake	500
Belle Isle Lake	500
Crystal Lake	1,000
Fairy Lake	1,500
Gleason Creek	500
Halfway Lake	400
Hooker Creek	400
Jean Baptiste Lake	500
Lake Timagami	2,500
Little Otter Lake	500
Moffatt Creek	500
Munro Lake	400
Pike Creek	1,250
South Wabi Lake	500
Spring Creek	1,250
Trout Creek	500
Ward Creek	500
Watabeag River	500
Welcome Creek	500
Whitney Lake	500

Victoria:

Corbin's Creek	100
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Waterloo:

Elora Stream	1,500
Erbville Creek	3,000
Idyle Wild Stream	300
Mannheim Stream	3,000

Welland:

Effingham Stream	1,500
Sulphur Springs	1,500

Wellington:

Bell's Creek	3,000
Bunyan Creek	2,400
Esson Creek	500
O'Dwyer's Creek	700
Saugeen River	3,000

Spencer Creek	4,000
Twelve Mile Creek	800

York:

Doan's Pond	500
Private waters— Sale and demonstration	8,626

ADULTS**Algoma:**

Batchewana River	250
Harmony River	250
Heydon Lake	500
Island Lake (Aweres) ...	330
Lower Island Lake	800
Root River	690
Trout Lake (Aweres)	700

Grey:

Woodland Spring	200
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Thunder Bay:

Bass Creek	800
Bruley Creek	1,000
Coldwater River	1,000
Current River	1,500
Kaministiquia River	800
Loon Lake	781
Lower Pass Lake	900
Mattawin River	800
Neebing River	800
Pearl River	900
Pitch Creek	1,000
Spring Creek (Dorion) ..	145
Trout Lake (Gorham) ...	800
Trout Lake (Stirling) ...	800
Private waters (Sale and demonstration)	404

WHITEFISH**FRY****Hastings:**

Bay of Quinte	12,000,000
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Kenora:

Eagle Lake	1,000,000
Lake of the Woods	32,132,500
Marchington Lake	250,000
Separation Lake	500,000
Stanzihikimi Lake	250,000

Prince Edward:

Bay of Quinte	39,000,000
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Rainy River:

Rainy Lake	10,260,000
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Thunder Bay:

Nipigon Lake	225,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1937, to March 31st, 1938—Continued

WHITEFISH—Continued

York:

Lake Couchiching	1,400,000
Lake Simcoe	2,200,000

Great Lakes:

Lake Superior	725,000
North Channel	4,291,400
Georgian Bay	46,240,000
Lake Erie	139,000,000
Lake Huron	20,210,000
Lake Ontario	74,000,000

EYED EGGS

Exchange	4,000,000
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HERRING

FRY

Frontenac:

Palmerston Lake	250,000
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Lennox-Addington:

Weslemkoon Lake	250,000
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Peterborough:

Loon Lake	250,000
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Prince Edward:

Bay of Quinte	1,100,000
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Great Lakes:

Lake Erie	470,000
Lake Ontario	2,800,000

Miscellaneous:

Demonstration Purposes	150,000
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EYED EGGS

Demonstration purposes	30,000
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MISCELLANEOUS

Demonstration purposes	3,053
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APPENDIX No. 2

ONTARIO DEPARTMENT OF GAME AND FISHERIES
DISTRIBUTION OF FISH ACCORDING TO SPECIES—1933 TO 1937, INCLUSIVE

	1933	1934	1935	1936	1937
Large-mouthed Black Bass					
Fry		35,250	130,000	45,000	135,000
Fingerlings	856	4,250	2,153	8,398	4,120
Yearlings & Adults		197	27*		92
Small-mouthed Black Bass					
Fry	545,000	365,500	696,000	780,000	1,275,000
Fingerlings	25,750	35,750	153,065	69,380	141,900
Yearlings & Adults	3,471	420	3,433	5,202	5,893
Maskinonge—Fry		909,500	460,000	274,000	420,700
Perch—Fry		95,000,000	53,031,400	46,080,000	9,150,000
Pickereel—Eyed Eggs		5,000,000	2,000,000	2,000,000	2,000,000
(Yellow) Fry	20,500,000	278,470,000	229,629,000	300,759,500	263,743,400
Pickereel (Blue) Fry					1,000,000
Brown Trout—Fingerlings	483,016	138,000	109,000	147,050	.....
Yearlings	674	14,500	9,650	7,290	97,484
Adults		689	6*		.....
Lake Trout—Eyed Eggs	200,000	402,000	.....	3,209,400	3,225,000
Fry	1,400,000	1,265,000	7,773,034	4,165,000	4,667,000
Fingerlings	16,012,700	14,045,450	14,564,000	18,253,244	15,782,350
Landlocked Salmon (Ouananiche) (Yearlings)			13,640		.....
Atlantic Salmon Fry					7,200
Rainbow Trout—Eyed Eggs		1,000	.....	.....	.....
Fry		4,480	.....	.....	.....
Fingerlings	27,016	312,512	134,075	138,000	105,240
Yearlings		25,014	314	3,507	.....
Kamloops Trout—Fingerlings			85,464	.....	80,000
Yearlings			10,796	.....	.....
Speckled Trout—Eyed Eggs	506,000	.....	.....	28,600	.....
Fry	725,000	.....	1,645,000	182,000	.....
Fingerlings	5,950,255	6,257,267	5,013,831	1,053,050	384,725
Yearlings	28,237	34,762	35,421	557,270	1,167,073
Adults	1,549	1,652	5,420	6,081	16,150
Whitefish—Fry	372,111,000	376,777,000	296,482,000	428,402,000	383,683,900
Eyed Eggs				112,500	4,000,000
Herring—Fry	22,805,000	17,512,000	43,760,000	56,120,000	5,270,000
Eyed Eggs					30,000
Golden Shiners		7,000	500	.....	.....
Miscellaneous					3,053
TOTALS	441,325,524	796,619,193	655,747,231**	862,401,472	696,395,280

* Exhibition fish

** This total does not include a distribution of 132,646,600 fry and eyed eggs during the five months immediately preceding the said report.

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of
EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	666	5	50	\$ 17,500	148	\$ 72,140	283	\$ 11,061	560,831	\$ 69,930
Lake Superior	422	9	239	50,000	118	52,350	79	4,312	875,425	110,119
North Channel	227	11	219	65,300	58	32,975	62	3,205	603,784	88,900
Georgian Bay	530	16	377	99,638	161	108,447	115	7,192	1,249,740	115,442
Lake Huron	442	17	463	136,695	144	96,180	35	1,680	1,867,623	242,442
Lake St. Clair	139	.....	.....	.....	44	11,266	88	3,975	.....	.....
Lake Erie	864	31	877	228,500	177	203,995	152	6,852	1,835,460	219,170
Lake Ontario	727	.....	.....	.....	226	108,500	194	7,431	1,357,750	113,364
Southern Inland Waters	423	.....	.....	.....	16	3,075	138	4,547	.....	.....
Totals	4,440	89	2,225	\$597,633	1,092	\$688,928	1,146	\$50,255	8,350,613	\$959,367

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickeral (Blue)	Pickeral (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	528	1,592,185	280,573	756,353	41,277	1,154,287
Lake Superior	2,246,952	300,816	1,698,585	7,356	5,872	61,832
North Channel	2,790	254,235	644,025	56,727	.....	71,271
Georgian Bay	26,896	1,122,895	1,504,194	49,916	.....	129,767
Lake Huron	199,772	286,981	1,753,699	806	20,982	197,683
Lake St. Clair .....	.....	355	.....	16,734	500	47,240
Lake Erie	99,447	1,401,016	151	2,750	9,354,687	448,957
Lake Ontario	1,572,911	551,550	204,955	141,368	26,203	21,785
Southern Inland Waters	4,286	8,355	12,811	8,930	.....	3,355
Totals	4,153,582	5,518,388	6,098,993	1,040,940	9,449,521	2,136,177
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$207,679.10	\$607,022.68	\$670,889.23	\$62,456.40	\$472,476.05	\$ 234,979.47

No. 3

DEPARTMENT, ONTARIO

Province of Ontario, for the Year Ending December 31st, 1937.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
.....	.....	.....	51	\$14,935	64	\$2,480	2	\$ 2	1,700	\$274	.....	.....	130	\$27,555	89	\$9,500	\$ 225,377
.....	.....	.....	50	25,455	.....	.....	.....	.....	28	134	.....	.....	39	15,230	30	12,223	269,823
.....	.....	.....	96	38,077	.....	.....	.....	.....	.....	.....	.....	.....	44	13,380	38	18,300	260,137
4	700	\$ 525	84	76,660	50	745	.....	.....	28,870	4,145	6	23	63	14,785	62	27,755	455,357
.....	.....	.....	137	81,450	.....	.....	.....	.....	11,139	1,387	.....	.....	71	27,545	34	9,740	597,119
45	10,200	4,791	126	12,300	5	500	3	3	2,850	136	.....	.....	18	6,150	9	1,625	40,746
50	13,600	8,370	549	306,800	13	1195	2	4	2,550	64	.....	.....	98	141,375	78	26,290	1,142,615
9	2,710	990	.....	.....	733	15,592	30	918	5,133	188	.....	.....	38	8,405	26	6,540	261,928
62	6,825	7,415	.....	.....	233	6,261	49	243	5,650	138	80	580	26	2,140	3	200	24,599
170	34,035	\$22,091	1,093	\$555,677	1,098	\$26,773	86	\$1,170	57,920	\$6,466	86	603	527	\$256,565	369	\$112,173	\$3,277,701

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
43,152	.....	15,117	210,972	35,680	3,646	312,048	1,137	4,446,955	\$424,656.49
1,637	.....	.....	131,070	.....	580	54,292	.....	4,508,992	349,994.95
9,078	.....	6,355	6,563	49	2,688	253,677	12	1,307,470	122,294.89
1,041	.....	4,388	91,709	4,736	29,059	114,480	6	3,079,087	319,004.49
7,225	.....	145,589	506,806	82,105	8,207	58,520	395	3,188,770	300,613.15
9,566	.....	31,582	.....	81,729	288,753	289,600	249	766,308	41,582.96
13,317	.....	1,691,074	.....	56,687	337,898	1,258,095	656	14,664,735	826,094.55
8,025	65,987	147,986	.....	210,798	153,027	271,877	73	3,376,545	222,022.57
.....	8,919	8,035	.....	143,908	262,549	292,862	.....	754,010	37,899.44
93,041	74,906	2,050,126	947,120	535,692	1,086,407	2,905,451	2,528	36,092,872	.....
.40	.07	.05	.06	.08	.05	.03	1.00	.....	.....
\$37,216.40	\$5,243.42	\$102,506.30	\$56,827.20	\$42,855.36	\$54,320.35	\$87,163.53	\$2,528.00	.....	\$2,644,163.49

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1936 Pounds	1937 Pounds	Increase Pounds	Decrease Pounds
Herring	4,298,562	4,153,582	.....	144,980
Whitefish	5,790,403	5,518,388	.....	272,015
Trout	6,458,730	6,098,993	.....	359,737
Pike	1,158,345	1,040,940	.....	117,405
Pickarel (blue)	6,899,501	9,449,521	2,550,020	.....
Pickarel (dore)	2,393,178	2,136,177	.....	257,001
Sturgeon	106,868	93,041	.....	13,827
Eels	61,780	74,906	13,126	.....
Perch	1,586,959	2,050,126	463,167	.....
Tullibee	920,155	947,120	26,965	.....
Catfish	609,488	535,692	.....	73,796
Carp	1,166,710	1,086,407	.....	80,303
Mixed and Coarse	2,802,028	2,905,451	103,423	.....
Caviare	1,906	2,528	622	.....
TOTALS	34,254,613	36,092,872	*1,838,259	.....

* Net Increase

APPENDIX No. 6

STATEMENT OF YIELD OF THE FISHERIES OF ONTARIO
1937

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring	4,153,582	\$.05	\$ 207,679.10
Whitefish	5,518,388	.11	607,022.68
Trout	6,098,993	.11	670,889.23
Pike	1,040,940	.06	62,456.40
Pickarel (blue)	9,449,521	.05	472,476.05
Pickarel (dore)	2,136,177	.11	234,979.47
Sturgeon	93,041	.40	37,216.40
Eels	74,906	.07	5,243.42
Perch	2,050,126	.05	102,506.30
Tullibee	947,120	.06	56,827.20
Catfish	535,692	.08	42,855.36
Carp	1,086,407	.05	54,320.35
Mixed and coarse	2,905,451	.03	87,163.53
Caviare	2,528	1.00	2,528.00
TOTALS	36,092,872		\$2,644,163.49

APPENDIX No. 7

ESTIMATED VALUE OF ONTARIO FISHERIES FOR A PERIOD
OF TWENTY YEARS
1918—1937 INCLUSIVE

1918	\$ 3,175,110.32	1928	\$ 3,033,944.42
1919	2,721,440.24	1929	3,054,282.02
1920	2,691,093.74	1930	2,539,904.91
1921	2,656,775.82	1931	2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49
1927	3,229,143.57	1937	2,644,163.49

Thirty-Second Annual Report

OF THE

**Game and Fisheries
Department**

1938-1939

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1940



TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 4 0

TO THE HONORABLE ALBERT MATTHEWS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Second Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1939.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
Minister in Charge,
Department of Game and Fisheries

Toronto, 1940.

THIRTY-SECOND ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON:
Minister in charge,
Department of Game and Fisheries.

SIR:—

I have the honour to submit to you in this and the following pages the Thirty-second Annual Report of the Department of Game and Fisheries, outlining the activities of Departmental services and including various statistical and comparative tables for the fiscal year ended March 31st, 1939.

INTRODUCTORY

The wild life of Ontario is a public legacy which for purposes of administration has been entrusted to the Department of Game and Fisheries. It has a value which outranks its material worth, because, besides being an integral part of our economic system, it is of tremendous importance from a recreational standpoint.

It is well to remember that the problem of administration is complicated by the destructive effects of modern civilization. Nature populated our forests with game and fur-bearing animals, our fields, woods and marshes with game and insectivorous birds and our waters with a variety and abundance of fishes not excelled elsewhere. In the scheme of nature a proper balance as to numbers was maintained through natural instinct. In addition, provision appears to have been made for checking over-abundance by means of disease which periodically attacks such species as rabbits, grouse, etc. This provision of nature for setting up a proper balance has been completely upset through a variety of causes. These are mostly the result of the encroachment of civilization and the economic development which is an essential part of human existence. These are some of the conditions which complicate the problem of conserving wild life and have upset the balance set up by nature.

While it is part of the conservation programme to restore as far as possible natural environmental conditions, it will be obvious that much of the difficulty is of a permanent nature incidental to our economic development. If these important facts are kept in mind the necessity for an intensive programme of conservation will be obvious and the need for adapting the work of rehabilitation to meet existing conditions apparent.

Summing up we find that we have in our wild life resources an asset of tremendous importance. It is a resource which, if used wisely, will keep on renewing itself from year to year. The conservation programme of the Department of Game and Fisheries is intended to stimulate this reproduction through protection, and to assist nature through artificial propagation. To be successful, such a programme requires the co-operation of every citizen. This assistance is best rendered by personal observance of the regulations and by discouraging illegal practices in others.

The general situation throughout the Province with regard to game and fish is reasonably satisfactory. During the open season deer were reported to be more numerous in many sections than they had been for many years. It is altogether

likely that the comparatively mild winters of the past two or three years and the added protection which has been afforded them has resulted in a large increase in numbers. Hunters are evidently finding this sport just as interesting as ever. In the sections of the Province where closed seasons have prevailed for years, deer have become very numerous; in fact, in many places they are so plentiful as to be the cause of complaints to the Department.

In the sphere of upland game, conditions are also very gratifying. Partridge were numerous enough to warrant an open season, and pheasants and Hungarian Partridge have become well established over a large section of the southern part of the Province. Rabbits still afford excellent winter hunting and the Jack has now spread over a very wide area.

The duck situation has improved considerably all over the continent, although Ontario hunters found no scarcity of wild fowl last year.

By reason of the fact that the water areas of the Province are so extensive and the varieties of fish available so numerous, it is difficult to do more than comment in a general way on the fishing situation. Angling for speckled trout and brown trout has improved considerably and many suitable streams in old Ontario, which for years have been more or less depleted, are once more providing excellent sport.

Bass fishing in many sections was the best it has been for a number of years.

The pictures and stories of large pike and maskinonge taken by anglers which have appeared in the press are proof that big fish are still to be had in reasonable numbers.

In short, we believe that this Province still provides scores of thousands of hunters and anglers with the finest in sport and health-giving exercise, and that the general situation from the sportsman's standpoint is good.

FINANCIAL

Upon the advent of the present Administration, and as you are aware, a change was made in the financial period, and commencing in 1935 provision was made under which the fiscal year extended from April 1st to March 31st, and each succeeding year since that time has provided an increased revenue as collected by this Department. It is believed that the following table of revenue, expenditure and surplus, for the present and preceding three years will be of interest.

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$683,938.72	\$451,041.91	\$232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45

REVENUE FOR FISCAL YEAR ENDING MARCH 31ST, 1939

ORDINARY—

MAIN OFFICE—

GAME—

Licenses—

Trapping	\$ 26,265.30
Non-Resident Hunting	80,415.00
Deer	83,526.55
Moose	2,574.00
Gun	95,788.45
Dog	5,348.35
Fur Dealers	22,007.75
Fur Farmers	9,550.00
Tanners	200.00
Cold Storage	147.00

\$ 325,822.40

Royalty 74,064.75

\$ 399,887.15

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 88,568.00
Angling	339,450.05

\$ 428,018.05

Sales—Spawn taking 311.47

Royalty 13,519.87

441,849.39

GENERAL—

Licenses—

Tourist Camps	\$ 6,855.00
Guides	7,928.00

\$14,783.00

Fines 26,245.40

Costs Collected (Enforcement of Game Act) 979.90

Sales—Confiscated articles, etc. 21,605.29

Rent 3,675.07

Commission retained by Province on sale of licenses 1,824.00

Miscellaneous 725.59

69,838.25

EXPERIMENTAL FUR FARM—

Sales—Pelts 2,900.45

Net Ordinary Revenue \$ 914,475.24

With reference to our financial operations during the year under review, and as previously stated, it will be observed that the total revenue collected by this Department shows a substantial increase over that of the previous year, and which increase amounts to a total of \$47,917.05. The principal specific increases to which this splendid showing may be attributed include an additional \$29,214.09 from the sale of resident deer and gun licenses, \$14,683.90 more fines imposed on those apprehended while violating various provisions of the Game and Fisheries Act and Regulations, an indication of the increased activity of the staff of enforcement officers, while the sales of confiscated articles produced \$10,921.55 in excess of the amount realized from the same source in the preceding year.

Expenditures, both capital and ordinary, amounted to a total of \$575,437.79, which left an operating surplus for the year of \$339,037.45 as shown in a previous statistical table. Some of the principal items of expenditure which go to make up this total include the sum of \$226,716.29 necessary to maintain the staff of enforcement officers operating under this Department, and some \$186,911.00 in connection with the propagation and distribution of fish by the Fish Hatchery Service of the Biological and Fish Culture Branch. Expenditures in connection with the payment of Wolf Bounties totalled the sum of \$25,435.24, while grants to assist in the work of research conducted by various Associations and individuals amounted to \$8,900.00. The sum of \$19,973.00 was expended for game birds and animals, principally in connection with the propagation, purchase and distribution of pheasants. For the purchase of and repairs to boats, boathouses and vehicles it was necessary to expend in all a total of \$12,898.31, while a total capital expenditure of \$16,902.91 was made to take care of additional fish culture ponds and dams, and bird farm buildings, the greater proportion of this amount being spent on improvements at the Codrington Bird Farm. Excluding the aforementioned capital expenditure the net ordinary expenditure therefore totalled \$558,534.88.

GAME

The comparative table next following details the various resident and non-resident hunting licenses which were issued during the period under review, as well as similar statistics for the preceding three years. While there was a noticeable reduction in the sale of non-resident general hunting licenses this may be attributed to the fact that following the legislative action provided at the 1938 Session there was no open season for moose in certain areas easily accessible to non-resident visitors, that is the southeastern and southwestern portions of Northern Ontario, but this decrease to a large extent was nullified by the increase in the number of non-resident deer licenses which were issued. Reference has previously been made to the greater number of resident deer and gun licenses which were issued this year.

	1935-36	1936-37	1937-38	1938-39
Resident Moose	496	542	580	471
Resident Deer	14,779	15,394	18,672	21,762
Resident Deer (Camp)	258	262	283	307
Resident Deer (Farmers)	5,221	5,386	6,503	7,719
Resident Gun	85,884	79,531	90,756	114,580
Non-resident Small Game	686	1,129	1,634	1,618
Non-resident Deer	652	848	1,036	1,329
Non-resident "General"	680	878	1,043	569

Conservation and co-operation loom large on the educational horizon of the sportsman. The two are being emphasized as the key to a fuller enjoyment of that wonderful heritage,—our wild-life resources,—with which nature has so bountifully blessed us. Conservation in its broadest sense and as applied to wild life is the effort to keep pace with modern conditions; to profit from past experiences resulting from misuse, and through wise management maintain an adequate supply for present and future needs; to provide proper control and protection based on knowledge and experience; to restore natural conditions wherever possible and to ensure development through natural and artificial propagation. It is a general programme so obviously essential to good management that it should appeal to everyone interested in the safeguarding of a valuable asset.

In the carrying out of such a programme of conservation the Department, due to the difficulties which arise from time to time, requires the full co-operation of the sportsman and which co-operation can best be provided by a complete observance of the laws himself, and by his assistance in educating others to the necessity for so doing. The Game and Fisheries Laws have the approbation of every good sportsman. They are restrictive only to the extent necessary to provide better sport. They embody the result of knowledge and experience and are conservation measures of the utmost importance.

Following is a summary of conditions as they apply to the game life of the Province,—both animal and bird,—compiled from information supplied in reports submitted by the various members of the Field Service Staff of the Department:—

DEER:—Reports received in the Department are to the effect that the deer herds in Northern Ontario are more than holding their own despite more intensive hunting than has been the case in previous seasons. There is every indication that these animals are, generally speaking, quite plentiful in the various districts in Northern Ontario, though there are some scattered and isolated sections in the various northern divisions where such is not the case, largely due to the fact that conditions are not quite favourable. Similar observations would be applicable in the several Districts and Counties in the more northerly portion of Southern Ontario, viz.:—Parry Sound, Muskoka, Haliburton and Renfrew, as well as the northern portion of Victoria, Peterborough, Hastings, Frontenac and Lanark.

The value of conservation measures for the protection of wild life perhaps has no better illustration than in the case of deer in the southwestern and southeastern counties. Years ago it became quite evident that the number of deer in these sections of the southern portion of the Province was rapidly diminishing and their numbers becoming quite scarce, and with a view to their restoration the protection of an entire closed season was provided.

Quite obviously the deer have permanently disappeared from the most thickly settled areas, but there is every indication, according to communications and newspaper reports reaching the Department, that they are more prevalent in largely increased numbers in the sections adjacent to the centres of densest population, and where they are now more numerous than they have been for the past several years.

Whatever may be the future of the deer in those areas where settlement and population have made the greatest inroads one thing is certain,—the perpetuation and development of our wild life resources can be definitely assured if we will but unite to afford them that measure of protection and proper control which is necessary to our wise use of them.

MOOSE:—Nowhere in Ontario are these animals to be found in numbers which may be classified as plentiful. There has been an entire close season on this species for several years in Southern Ontario, and reports indicate some improvement in Muskoka, Haliburton, Frontenac and northeastern Renfrew. In Northern Ontario conditions were about the same with some increase in scattered sections of Cochrane and Sudbury Districts. An entire close season existed in the northern part of Nipissing, the southern part of Temiskaming and the southeastern part of Sudbury in the east, and in the District of Rainy River and that part of the District of Kenora south of the main transcontinental line of the C.N.R., in the west and reports would indicate slight improvement in these two protected areas.

CARIBOU:—An entire close season prevails on this species, a few of which may be found in scattered and widely separated sections in northwestern Cochrane,

northern Sudbury, Algoma (particularly the Chapleau Game Preserve), Lake Nipigon section of Thunder Bay, and the Lake of the Woods section.

ELK:—This species also is provided the protection of an entire close season. The original herds were imported from Western Canada. In southern Ontario there are a few specimens on the Bruce Peninsula and on Beausoliel Island in the Georgian Bay, as well as on the Petawawa Crown Game Preserve in Renfrew County. Their numbers in Northern Ontario are principally to be found within such Crown Game Preserves as Nipissing, Burwash, Chapleau, Ranger Lake and Onaman River. Some improvement is reported.

BEAR:—These animals are reported to be quite plentiful in many sections,—particularly in Northern Ontario,—as well as in the northern portion of Southern Ontario. It would appear from reports to the Department that increasing numbers of sportsmen, both resident and non-resident, participate in the sport which the hunting of these animals provides.

RABBITS:—The interested hunter knows that in Ontario excellent sport is provided by the hunting of rabbits during the late fall and winter months. In the southern counties the cottontail is quite plentiful practically throughout, though reports indicate they are none too plentiful in some of the eastern sections. The jack-rabbit or European hare is plentiful in the southwest as well as in some counties to the north. It is found apparently as far east as Northumberland and north to Bruce, Grey, Dufferin, Simcoe, Victoria and Peterborough. The snowshoe rabbit is available in the northern portion of Southern Ontario and in Northern Ontario, though conditions as to the prevalence of this particular species vary considerably. In Parry Sound, Muskoka, Haliburton and Renfrew while not too plentiful they are reported to be increasing numerically, and somewhat similar conditions exist in sections throughout the north.

SQUIRREL (Black and Grey):—These animals are reported to be quite prevalent in the southern and western counties. Sufficiently numerous to warrant the provision of a limited open season and restricted catch.

PARTRIDGE:—This season the hunter had an opportunity of taking this fine sporting bird. The increase in numbers of the ruffed grouse justified an open season which was divided into two parts to afford a wider enjoyment of the sport. Sportsmen are more or less familiar with the cycle of abundance and scarcity which appears to be one of the characteristics of the life history of this bird, and which is one of the primary reasons why open seasons on partridge are not more numerous. The species known as the prairie chicken, or sharp-tailed grouse, is found only in the extreme north and west and their numbers were not too plentiful even in these sections.

QUAIL:—These birds inhabit only the extreme southwestern counties of Essex, Kent, Elgin, Lambton and Middlesex, from where reports are to the effect that conditions and prevalence are quite favorable. They are also reported, though not plentiful, from Dundas, Stormont and Glengarry.

PHEASANT:—These fine game birds are found chiefly in the areas in which Departmental re-stocking has been provided, in the counties at the western end of Lake Ontario and along the north shore of Lake Erie. The continued development of the scheme of Regulated Game Preserve Areas,—that is the Townships in which hunting is controlled,—necessitated an intensification of distribution. The distribution of pheasant eggs was entirely eliminated and our efforts along these lines were confined to the actual distribution of the birds themselves. During the year approximately 20,000 live pheasants were distributed, the greater proportion of which were liberated in the forty-nine Townships included in the scheme of Regulated Game Preserve Areas.

HUNGARIAN PARTRIDGE:—This bird as the name implies is a non-native. The development of this species has been rather an enigma. His progress in Ontario cannot be considered spectacular, but reports from certain sections, particularly the southwestern and southeastern counties, seem to indicate that the birds are steadily becoming more numerous. The following report from one of our Field Officers may be of interest:—

“Concerning the shipment of ten Hungarian partridges which you sent to me last Spring (1938) to be liberated, I thought probably you would be interested to know that at present we have two nice flocks of these birds wintering near my place. One flock consists of about thirty-five birds and the other of about twenty birds. There may still be others around that I do not know of. These birds seem to be very hardy and so far appear to be quite capable of surviving the tough winter and deep snow of this district.”

DUCKS:—Reports from various members of the Field Staff indicate that this fine game bird continues to provide enjoyable sport during the regular open season in practically every section of the Province, though as has been observed in previous reports the restrictions which govern the open season and limits of catch as at present existing will require to be continued to maintain the degree of hunting which now prevails.

GEESE:—There are but few sections of Ontario in which goose shooting is available. The James Bay shore in the far northern portion of the Province affords perhaps the best opportunity for this sport, but during the southern Fall migration apparently the only section in which hunting is available is in the extreme south-western counties.

WOODCOCK:—These birds are not very plentiful anywhere in the Province and are extremely scarce in the north. It would appear from reports that in some eastern Counties and along the Lake Erie shore the most favourable conditions prevail.

SNIBE:—While these birds are somewhat more numerous than the woodcock, practically the same conditions apply, though there are more sections in which their numbers provide desirable sport.

PLOVER:—Continues quite scarce throughout the entire Province, though some slight improvement is reported from different areas in the extreme southerly counties.

During the year under review Regulations were adopted which provided for special open seasons, details of which are as follows:—

- (a) Deer in that portion of Carleton County lying west of the Rideau River,—from November 5th to 19th, inclusive. General deer hunting regulations governed.
- (b) Deer in the Counties of Grey, Bruce and Simcoe, from November 14th to 19th, inclusive. General deer hunting regulations governed, except that the use of dogs was not permitted.
- (c) Pheasants on Pelee Island, on October 21st and 22nd, and October 28th and 29th. Limit of five birds per day. Special Municipal hunting license \$5.00, October 21st and 22nd; \$3.00, October 28th and 29th.
- (d) Pheasants in the Regulated Game Preserve Areas in the Counties of York, Halton, Wentworth, Lincoln and Welland, on October 21st, 22nd and 29th. Limit of three cock birds per day. Special Municipal hunting license \$1.00 per day.

- (e) Pheasants in Westminster Township (Middlesex) Regulated Game Preserve Area, on October 21st and 29th and November 5th. Limit of three cock birds per day. Special Municipal hunting license \$1.00 per day.
- (f) Pheasants in the Regulated Game Preserve Areas in the Counties of Peel, Haldimand, Brant, Norfolk and Elgin, Metcalfe Township (Middlesex), and Amherst Island (Lennox), on October 21st and 22nd. Limit of catch three cock birds per day. Special Municipal hunting license \$1.00 per day.
- (g) Pheasants, quail and Hungarian Partridge, in the Counties of Essex (excluding Pelee Island) and Kent, on October 21st, 22nd and 29th. Limit of three cock pheasants, four quail and two Hungarian Partridge per day.
- (h) Partridge throughout the Province, (except Regulated Game Preserve Areas), from October 10th to 15th inclusive, and from November 5th to 10th inclusive. Limit of five birds per day and not more than fifteen during the two periods specified.
- (i) Black and grey squirrel throughout the Province, on October 21st and 22nd. Limit of four per day.

FUR BEARERS

Conditions as they apply to fur-bearing animals throughout the Province are set forth in the following references, as summarized from reports of members of the Field Service Staff:—

BEAVER:—This species has enjoyed the protection of an entire close season with resulting improvement in many sections, particularly in the northern portion of the Province.

FISHER:—This animal as a species is extremely scarce, and the number trapped in any one season is very limited.

FOX:—There are indications that fox continues to be quite plentiful in many sections and while the figures contained in the following table show a decrease, this may possibly be due to the fact that prices are not sufficient to warrant the trapper taking these animals at this time.

LYNX:—This species is undoubtedly becoming extremely scarce throughout. Reports do not refer to improvement anywhere.

MARTEN:—Also very scarce. As in the case of lynx there are no reports of improvement.

MINK:—These animals are becoming quite scarce in the southern counties. In Northern Ontario conditions remained about usual with some slight improvement in scattered and widely separated areas.

MUSKRAT:—Reports are to the effect that there are many sections in the Province where conditions are favourable and as a result this species was fairly plentiful. It will be noted that there was an increase in the number of these animals which were trapped during the open season in the year under review, but there is no doubt this species will continue to require the protection which has been provided in more recent years.

OTTER:—This species is very scarce in practically every section of Ontario. The annual catch has remained fairly steady, and generally speaking they are available only in Northern Ontario.

RACCOON:—There was quite a noticeable decrease in the catch of raccoon during the open season which prevailed in 1938, though reports indicate that conditions affecting this species remained fairly normal. These animals are found only in the southern counties.

SKUNK:—Reported to be quite plentiful in practically every section of Southern Ontario, though there are a few sections in the north in which they are not so numerous and while the catch during the year shows a large increase, there is no doubt the prices paid for the pelts discourages the average trapper from making any special effort to take these animals.

WEASEL:—Except in southwestern counties reported to be fairly plentiful. While there was an increased catch in 1938-39, the value of the pelt to the trapper is not sufficient to warrant any particular activity for the taking of these animals.

The following comparative table shows the numbers of pelts of various species of fur-bearing animals which were exported from and dressed within the Province, during the year under review as well as in the three years immediately preceding:—

	1935-36	1936-37	1937-38	1938-39
Bear	411	476	496	363
Beaver	6,785	238	235	1,366
Fisher	2,137	2,117	1,463	1,467
Fox (cross)	5,424	4,156	2,426	2,164
Fox (red)	37,044	35,232	24,912	22,366
Fox (silver or black)	500	360	201	131
Fox (white)	883	17	47	142
Lynx	2,642	2,081	1,284	785
Marten	1,282	1,464	1,709	2,074
Mink	47,057	33,930	22,766	25,111
Muskrat	398,043	370,239	343,972	508,893
Otter	3,701	3,779	3,737	3,764
Raccoon	13,259	14,243	13,194	9,493
Skunk	50,747	87,950	61,576	89,100
Weasel	42,643	78,643	79,853	93,488
Wolverine	4	2	5	3

Information compiled in the Department shows that these furs were worth to the trapper the sum of \$1,168,409.40 and while this figure is slightly more than \$200,000.00 in excess of a similar compilation for the previous year, the increase is largely attributable to the fact that the catch of muskrats in 1938-39 exceeded by 165,000 the catch in 1937-38.

It is again necessary to state that present restrictions which are provided for the protection of the more desirable fur-bearing animals are essential for the maintenance and development of existing conditions which apply.

The fur farmer is gradually supplying the trade with certain classes of pelts which are becoming scarce in the wild, and in this connection the following statistics are supplied in the matter of the product of licensed fur farms which were marketed during the year: Cross fox pelts to the number of 293 were disposed of, 258 of which were exported and 35 dressed in the Province, the value of which was \$4,058.05; silver and black fox numbering 38,234 were disposed of, 30,963 exported and 7,271 dressed in the Province, all of which were valued at \$658,770.82; and 35,918 mink

were disposed of, of which 35,491 were exported and 427 dressed within the Province, all of which were worth \$280,519.58 to the fur farmers. Thus the entire fur production within the Province produced the sum of \$2,111,757.85 for trappers and licensed fur farmers. The furs above mentioned, and which were produced on fur farms were not subject to the payment of royalty in accordance with the exemption provided in the Game and Fisheries Act.

FUR FARMING

During the year 1,791 fur farmers' licenses were issued, an increase of 255 or more than sixteen percent, the largest annual increase for ten years. These farms may be classified to show 837 as fox farms, 708 as mink farms, 202 mixed farms, (principally fox and mink) and 44 miscellaneous farms.

The subjoined comparative table shows the total breeding stock retained on these licensed premises as at the first day of January in each of the four years enumerated:—

	1936	1937	1938	1939
Beaver	70	21	25	2
Fisher	16	20	16	19
Fox (cross)	367	257	235	197
Fox (red)	228	207	140	120
Fox (silver or black)	21,645	23,869	24,848	22,923
Fox (blue)	5	0	0	98
Lynx	2	2	2	2
Mink	12,332	15,539	21,982	30,378
Muskrat	375	351	302	267
Raccoon	524	358	351	284
Skunk	3	5	9	6
Bear	21	15	15	15
Marten	4	4	11	15

From the foregoing statistical table it will be observed that silver fox and mink represent the greater proportion of the operations thus carried on, while of these mink is rapidly assuming a role of major importance.

The general location of these fur farms is shown in the following table:—

County or District	Number of Farms
Algoma	35
Brant	10
Bruce	69
Carleton	44
Cochrane	13
Dufferin	8
Dundas	5
Durham	20
Elgin	11
Essex	9
Frontenac	47
Glengarry	5
Grenville	7
Grey	125

County or District	Number of Farms
Haldimand	27
Haliburton	1
Halton	24
Hastings	20
Huron	73
Kenora	30
Kent	22
Lambton	28
Lanark	111
Leeds	50
Lennox & Addington	1
Lincoln	4
Manitoulin	67
Muskoka	36
Middlesex	47
Nipissing	18
Norfolk	34
Northumberland	8
Ontario	44
Oxford	33
Parry Sound	24
Patricia	3
Peel	15
Perth	57
Peterborough	10
Prescott	12
Prince Edward	7
Rainy River	31
Renfrew	93
Russell	9
Simcoe	102
Stormont	11
Sudbury	13
Temiskaming	11
Thunder Bay	71
Victoria	21
Waterloo	53
Welland	13
Wellington	34
Wentworth	18
York	97
Total	1,791

CROWN GAME PRESERVES

During the year an important addition was made to the game preserves of the Province by the establishment of a waterfowl sanctuary at Hannah Bay in the James Bay District.

This refuge embraces one of the finest nesting and feeding grounds in the district, and will prevent undue destruction at the source of supply. It has an area of some seventy square miles and extends south from the line projected from East Point on Hannah Bay to the Ontario-Quebec Interprovincial boundary, and north of a line projected from the south bank of the Mississikabe River where it enters Hannah Bay to the Quebec boundary.

A change was made in the boundaries of the Dumfries Game Preserve by withdrawing therefrom all that portion of South Dumfries Township located within the area. This was made desirable by the fact that the whole township of South Dumfries was established as a Regulated Game Preserve Area.

At the same time a small Crown Game Preserve was set up within the Township of South Dumfries.

The designation, location and approximate size of the areas are as follows:—

DESIGNATION	COUNTY	EXTENT IN ACRES
Hannah Bay Waterfowl Sanctuary ...	Cochrane District	44,800 approx.
xDumfries Game Preserve	Waterloo	14,000 "
South Dumfries Crown Game Preserve	Brant	1,200 "

x Reduced in size.

REGULATED GAME PRESERVE AREAS

In introducing the subject, it seems desirable to say a few words as to the reasons for the inauguration in 1937 of this system of further control in connection with hunting.

For many generations the sportsmen of the Province have been privileged through the goodwill of the landowners, to make free use of private property in their pursuit of game. It should be noted, however, that while game is a common heritage, the land which it inhabits, particularly in Southern Ontario, is mostly privately owned. To reduce the game to possession, the hunter must have the goodwill of the landowner, failing which, a spirit of antagonism is set up between the two which results in the cancellation of the privileges of entering upon the lands to hunt game. Recognizing this fact, and feeling that any plan which would have the effect of eliminating the grievances of the farmer through more rigid control of the hunter would be in the best interests of the sport, the Department formulated a plan for the establishment of regulated shooting areas in certain Townships.

To better understand the conditions which apply, it should be noted that in most of these areas the available hunting consists of upland game birds, rabbits and ducks. The latter two are fairly plentiful and provide most of the hunting. For many years the Department has been endeavouring to stock suitable areas of the Province with English Ringneck Pheasants and although the results in certain counties were sufficiently successful to warrant open seasons, in others development was somewhat slow. Most of these latter areas never were opened to pheasant hunting and the good sportsman refrained from molesting the birds.

The opening of a short pheasant season in a few districts such as the Niagara Peninsula also resulted in a large influx of hunters to these areas. A congestion of hunters in any district leads to many complications and much unfavourable publicity, and in any case, where facilities are limited and many desire to take part, the result is usually unsatisfactory.

Another situation which frequently created a great deal of annoyance to rural residents was the heavy influx of hunters from urban centres who literally swept over the countryside on jack rabbit drives. These drives were not always well conducted or carried out with a proper regard for the property rights of the farmer. As a result friction sprang up and bad feeling ensued.

All of these factors were taken into consideration in devising the scheme of Township Regulated Shooting Areas.

What are the advantages of such regulated areas? In the first place, the control exercised through limiting the number of non-residents who may hunt in the area, and the protection afforded the farmer, as well as the wild life, through the closing of the area to all hunting except during a small portion of the year, has brought about a better spirit of co-operation between the farmer and the sportsman. The former is willing to open his lands to such reasonable demands, and the latter has reasonable assurance that when he has bought a license he will not be embarrassed by being ordered off the land, unless it is privately posted against trespass, and that through the extensive planting of birds within the area he will be reasonably sure of at least the opportunity of obtaining some game.

Reports received by the Department from Municipalities which have had the opportunity of trying out the scheme are unanimous in designating it a success.

This experiment in controlled areas for hunting, particularly in regard to pheasants, received a great deal of publicity. Some fifty townships were involved in 1938 and in order that there might be sufficient pheasants to justify an open season, the Department distributed within the regulated areas close to 16,000 of these birds in such proportions as the size of the area warranted. Here it should be noted that the birds were raised or purchased for the purpose of providing a shoot, by means of funds supplied by the sportsman himself in the form of licenses of one kind or another. The pheasants released in each township, added to the existing natural stock, created a supply sufficient to warrant an open season and give the hunter reasonable assurance of good sport.

For the benefit of those who may be under the impression that such extensive shooting would probably result in near extinction of the species it is pointed out that under the conditions involved the birds should become more numerous than ever before. To appreciate this contention it is necessary to remember that the pheasants released by the Department were in almost equal proportions in so far as sex is concerned. During the open season only cock birds were included in the bag limit, which left the hen birds, amounting to fifty per cent of the additional stocking, for breeding purposes.

The pheasant is a prolific breeder, each nest consisting of from fifteen to twenty or more eggs, and two hatches per year being quite common. Obviously, therefore, if suitable habitat is available the stock will replenish itself, despite the toll of the hunter during a brief open season.

In view of all the facts, as disclosed by these reports, it is apparent that regulated shoots can be organized without in any way providing a menace to life or property or seriously interfering with the development of the species concerned. It is essentially a matter of co-operation. In this respect the Department acknowledges with pleasure the splendid co-operation of the municipal authorities, the landowners and the sportsmen in making the scheme an unqualified success from the standpoint of order, good will and recreational pleasure.

The following is a schedule of the Townships which were included in this scheme of Regulated Game Preserve Areas, during 1938:—

The Townships of Markham, King, East Gwillimbury and Scarborough in the County of York.

The Townships of Caledon and Chinguacousy in the County of Peel.

The Townships of Nelson and Trafalgar in the County of Halton.

The Townships of Ancaster, Barton, Beverley, Binbrook, East Flamboro and Saltfleet in the County of Wentworth.

The Townships of Caistor, Clinton, Gainsboro, Grantham, Louth, Niagara, North Grimsby and South Grimsby in the County of Lincoln.

The Townships of Bertie, Humberstone, Willoughby, Pelham, Thorold, Crowland, Wainfleet and Stamford in the County of Welland.

The Townships of Canboro, Dunn, North Cayuga, Oneida, Rainham, Seneca, South Cayuga, Walpole, Moulton and Sherbrooke in the County of Haldimand.

The Townships of Onondaga and South Dumfries in the County of Brant.

The Townships of Townsend and Windham in the County of Norfolk.

The Township of Dereham in the County of Oxford.

The Townships of Bayham and South Dorchester in the County of Elgin.

The Township of Metcalfe and a portion of the Township of Westminster in the County of Middlesex.

WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty statistics for the current fiscal year and the three years preceding:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1936 .	1,159	1,713	33	2,905	42,399.89
For year ending Mar. 31, 1937 .	1,090	1,197	31	2,318	33,360.63
For year ending Mar. 31, 1938 .	1,022	837	30	1,889	27,474.24
For year ending Mar. 31, 1939 .	1,031	723	41	1,795	25,357.00

During the year 1,341 applications for wolf bounty were considered in respect of some 1,837 wolves. Bounty was paid on 1,311 of these claims representing 1,795 wolves as enumerated in the preceding table, while the claims for bounty of twenty-seven applicants involving some forty-two supposed wolf pelts were rejected.

The payment of bounty under the provisions of the Wolf Bounty Act continued at basic rates of \$15.00 for adult wolves and \$5.00 for pups under the age of three months.

The following table sets forth in detail the sources of origin of the various pelts for which application for bounty was made:—

ANALYSIS OF APPLICATIONS FOR WOLF BOUNTY

County or District	Number of Timber	Number of Brush	Number of Pups	Total Pelts
Algoma	120	110	4	234
Bruce	20	13	...	33
Carleton	...	4	...	4
Cochrane	23	4	...	32
Essex	...	1	...	1
Frontenac	2	4	7	13
Grey	...	5	...	5
Haldimand	...	1	...	1
Hastings	11	1	9	21
Haliburton	...	12	...	12
Kenora	274	123	...	397
Lambton	...	2	...	2
Lanark	...	1	...	1
Lennox & Addington	4	3	...	7
Manitoulin	18	79	9	106
Muskoka	34	3	...	37
Nipissing	56	21	...	77
Norfolk	...	5	...	5
Northumberland	...	1	...	1
Ontario	1	1	...	2
Parry Sound	51	4	...	55
Patricia	42	13	...	55
Peterborough	5	...	...	5
Rainy River	125	153	...	278
Renfrew	31	1	...	32
Simcoe	4	1	10	15
Sudbury	63	91	...	154
Temiskaming	2	8	...	10
Thunder Bay	141	79	10	230
Victoria	3	4	...	7
Welland	...	4	...	4
York	...	1	...	1
	1,047	741	49	1,837

Total expenditures which were incurred in the administration of the Wolf Bounty Act were the sum of \$25,435.24, of which, as has been previously stated, the sum of \$25,357.00 was actually paid out as bounty, and details of which payments are set forth in the following statistical table:—

Brush Wolves	50 @ \$ 6.00	\$ 300.00
	673 @ \$15.00	\$10,095.00
	723	\$10,395.00
Timber Wolves	73 @ \$ 6.00	\$ 438.00
	958 @ \$15.00	\$14,370.00
	1,031	\$14,808.00
Pups	17 @ \$ 2.00	\$ 34.00
	24 @ \$ 5.00	\$ 120.00
	41	\$ 154.00
TOTAL	1,795	\$25,357.00

In respect to wolves killed in a County, bounty is paid by the County Treasurer, and forty per cent of the amount is rebated to the Counties by the Provincial Treasurer. In the Northern Districts the total amount of bounty is paid by the Province.

It is of interest to note that 59% of the wolves killed in 1938-39 were classified as timber wolves, whereas the ratio was 55% in 1937-38, 48% in 1936-37 and 40% in 1935-36.

GENERAL

TOURIST OUTFITTERS:

The following is an analysis of the distribution by Districts of the camps of tourist outfitters licensed to operate in Ontario during the year:—

District	Licenses		
	Non-Resident	Resident	Total
Algoma	7	73	80
Cochrane	0	3	3
Kenora	17	97	114
Manitoulin	3	43	46
Nipissing	9	88	97
Parry Sound	5	102	107
Patricia	0	3	3
Rainy River	4	23	27
Renfrew	0	9	9
Sudbury	2	60	62
Temiskaming	0	3	3
Thunder Bay	4	20	24
Total	51	524	575

DEPARTMENTAL BULLETIN:

With reference to the publication of the "Bulletin" and the purpose for which it is prepared and distributed we quote the following extract from the issue of April, 1938:—

"With this number we conclude volume two of the Bulletin, being the first of the series in its present form. During the year we have attempted to keep before us the fact that the Bulletin has a special mission to perform, viz, the stimulation of interest in the conservation of our wild life natural resources, and the education of the public in the wise use of this valuable heritage. No attempt has been made to usurp the place of the sporting magazines, which are doing a valuable work along the same line, nor to enter the field of romance and story in connection with the recreational pleasures of hunting and fishing. It has been our object to present as simply, and as pithily as possible, the many difficult and complex problems with which the conservation of our wild life is bound up; to give in everyday language brief facts concerning the life history of many species of fish and game; to point out the responsibility of the individual in connection with the protection of our natural resources, and to encourage the work of the Sportsmen's Protective Associations and all other organized effort which has for its object the Restoration, Preservation and Perpetuation of our wild life. The activities of the Department have not been forgotten and we hope that the information which is published from time to time will serve to keep the sportsmen informed as to what is being done in their interest.

And now, with the experience of the first two volumes behind us we would like to expand our opportunities for effective service by a closer contact with sportsmen and sportsmen's associations. We therefore invite our readers to assist us by contributing such personal experiences while hunting or fishing as might help us to a better understanding of the relationship which exists between birds, beasts, fish and plant life; or other ideas of non-controversial nature along conservational lines—obviously matters of Departmental policy cannot be discussed in the

Bulletin. Association Secretaries might also keep us informed of their activities so that proper reference could be made.

We acknowledge our indebtedness to the press for the additional publicity given to many of the articles appearing in the Bulletin, and hope that Editors will feel free to use any material they may find suitable for republication.

As a result of the educational and publicity work which is being carried on by sportsmen's organizations, nature clubs, the press, sporting magazines and the Department, the public is to-day more conservation-minded than ever before and this fact augurs well for the future of the movement. We believe that more real success can be attained through education than through prosecution, although human nature is such that enforcement will always be essential for protective purposes. With this in mind we pass from the old to the new, conscious of our shortcomings, but with the hope that our efforts to stimulate interest have not been entirely in vain."

GAME AND FISHERIES ACT:—

The present laws and regulations are a most important part of the general programme for the conservation of our fish and game resources. They are the result of practical experience plus the biological knowledge acquired after years of research. They are restrictive only in so far as is necessary to ensure proper use and a continuous supply. Close seasons are provided in the interest of natural reproduction and are determined from a study of the life history of the various species. Bag limits and limits of size are intended to ensure an equitable distribution of the available resources. Obviously limiting the take helps prevent waste.

In every walk of life there are certain laws and conventions which govern, and these we must know and observe or suffer the consequences. The observance of the laws which regulate the taking of fish and game is of major importance in securing for every citizen the opportunity to enjoy the recreational pleasures which wild life affords. It is the duty of every sportsman, therefore, to make himself familiar with these laws and, having done so, see that his actions are in keeping therewith. Co-operation in this regard will help to conserve a valuable heritage.

What impresses one at meetings of the Legislative Fish and Game Committee is the evident sincerity in the cause of wild life conservation of the delegates who attend to present recommendations, and the entire absence of requests that might be termed selfish or shortsighted. The success of the conservation movement lies in the development of this spirit of co-operation through individual and organized effort, and if the tone of the representations which are made before this Committee is a reflection of the attitude of the public, then a new conception of individual responsibility for the protection and restoration of our game and fish resources has been born, and this will undoubtedly be an important factor in providing and maintaining better hunting and fishing.

Amendments enacted by the Legislative Assembly and which became effective during the year included the following provisions:

- (a) Rescinding the definition of the word "monitor," as used by duck hunters.
- (b) Authorizing the issue of special hunting licenses by Municipal authorities to be valid in Regulated Game Preserve Areas.
- (c) Providing an entire close season for moose in portions of Sudbury, Nipissing and Temiskaming, in the southeastern part of Northern Ontario, and in Rainy River and that part of Kenora south of the main transcontinental line of the Canadian National Railway in the southwestern part of Northern Ontario.

- (d) Providing that the open season for muskrat be annually established by Regulation.
- (e) Changes in the provisions which govern the operation and licensing of Tourist Outfitter's Camps.
- (f) Providing that non-resident hunters shall engage the services of licensed guides while hunting deer in the Districts of Rainy River and Kenora.
- (g) Providing a limit of catch on cotton tail rabbits in the Counties of Essex and Kent, and prohibiting the purchase and sale of these animals in these two Counties.
- (h) Permitting the use of automatic shotguns by hunters when such firearms are permanently plugged to hold not more than three shells.
- (i) Mining camps included among the places where it is unlawful to possess or carry firearms.
- (j) Permitting non-resident anglers to export the lawful catch of two days' fishing of all game fish species. (One day's catch only in the case of Maskinonge.)

Amendments to the Fisheries Regulations adopted during the year include the following provisions:—

- (a) Rescinding the definition of the term "one day."
- (b) Including Hog's Back Dam, on the Ottawa River, among the waters in which it is prohibited to use spears and dip nets to take coarse fish during April and May.
- (c) Changes in the open seasons for Maskinonge, Pickerel and Whitefish.
- (d) Changes in the special regulation which applies to fishing in the waters of Victoria, Peterborough, Northumberland and Durham.

ENFORCEMENT SERVICE

Years ago the enforcement of laws in connection with hunting and fishing was almost negligible. There were few Game Wardens, and those who held the appointments were paid so poorly that they could not devote their full time to the work, and found it more advantageous to close their eyes to much that took place. As a result of this condition, law observance was at a low ebb and wild life suffered thereby. Gradually, however, an efficient and effective protective service has been built up and is doing splendid work in connection with the enforcement of the Game and Fisheries Act.

The work of the Overseer, or Game Warden, is beset with many difficulties. In the first place, he must of necessity cover an extensive territory, much of it off the beaten track; and in the second place, he is faced with an attitude on the part of a section of the public which implies a lack of any serious moral qualms over non-observance of the Game and Fisheries Laws.

The Game Warden is invariably courteous in carrying out his duties, but his task would be much easier if all those who hunt and fish would recognize that the laws are intended to ensure the greatest pleasure for the greatest number and that to disregard the rules of the game is to deprive posterity of its rightful share.

At the present time there are some ninety permanent Wardens devoting their full time to enforcement work. The services of this field staff are augmented by the assistance of the Provincial Police Force, as well as certain seasonal officers who are employed for varying periods in order to provide adequate patrol service along certain waters during the spring and fall fish spawning periods, as well as enforcement work during the various hunting seasons.

We are happy to report that the general body of sportsmen never were so conservation-minded as they are to-day. As proof of this we would point to the fact that in 1938 more than 1,500 sportsmen voluntarily offered their services to, and were accepted by the Department as Deputy Game Wardens, in addition to 633 who were provided with such appointments at the request of Municipal organizations to assist in enforcing the regulations which govern in the Townships created as Regulated Game Preserve Areas. These men are clothed with all the authority necessary to enforce observance of the Act. It is obvious that the practical support and moral effect of this army of voluntary workers is of very great importance in preventing abuses of the privileges enjoyed by sportsmen.

During 1938-39 there were some 1,878 cases in which offenders against provisions of the Game and Fisheries Act and Regulations were apprehended by Game and Fisheries Overseers and others authorized to act in the way of securing observance of these provisions, and in which cases various articles of hunting, trapping and fishing equipment and the product thereof were confiscated at the time of apprehension. A compilation of the various reports of seizure submitted by the officers concerned shows that such action was provided by Game and Fisheries Overseers in 1,638 of these cases, by members of the Ontario Provincial Police Force in 78 cases, by Deputy Game and Fishery Wardens in 69 cases, and in the remaining 93 cases seizures were made by co-operative action of Overseers, Provincial Police and Deputy Game Wardens.

A condensed summary of the articles confiscated shows the following:—

Live animals	in 32 cases
Birds, game animals and meat	in 226 cases
Firearms and ammunition	in 760 cases
Fish	in 275 cases
Nets and Fishing equipment	in 327 cases
Angling equipment	in 114 cases
Pelts and hides	in 287 cases
Traps and equipment	in 132 cases
Water craft	in 51 cases
Motor Vehicles	in 17 cases
Lights	in 42 cases
Spears	in 63 cases
Miscellaneous articles	in 56 cases

This total of 2,382 does not correspond with the actual number of seizures, viz:—1,878 by reason of various entries on some seizures. For instance an irresponsible hunter might lose a gun and some birds or game animals, a trapper operating contrary to the regulations some traps and pelts, an indiscreet angler his fishing rod and some speckled trout or bass, while there would be instances where spears, lights and fish would be involved in each case, as well as other combinations which would account for the apparent discrepancy.

Included among the pelts confiscated were 947 beaver, 2 fisher, 89 fox, 8 marten, 32 mink, 501 muskrat, 16 otter, 68 raccoon and 304 weasel.

The following comments, extracted from issues of the Bulletin, concerning the sales of confiscated articles and furs, will be of interest.

Those who have any doubts as to the efficiency of the work which is being done to curb law breaking, or the need for eternal vigilance to protect a common heritage, would do well to arrange to visit one of the sales of confiscated articles conducted by the Department and, in viewing the multiplicity of weapons seized for illegal use, read the story of why conservation is necessary for the perpetuation of wild life. The rows of firearms stacked so menacingly around the room remind one forcibly that their late owners failed to play the game, and in doing so not only broke the law but menaced the rights of others. The weapons include almost every make and calibre of gun, from the toy .22 to the deadly automatic and the modern "pump." Each of them has a story of its own, a story of deliberate law breaking and swift retribution.

There are those of ancient vintage which attracted attention, principally because they lack the refinements of the modern firearm, or because they conjure up memories which are probably better forgotten.

There is a long line of those efficient little nomads, the .22. They run the gamut of make and style, from the cheap little toy to the high-powered repeater. Most of them are in good shape, but there are a few whose general appearance shows a lack of care.

In addition to the firearms there is a miscellaneous collection of fishing rods, reels, lines, baits, minnow pails, axes, flashlights, lanterns, haversacks and traps. As showing the extent of the illegal destruction which takes place and as a pleasing commentary on the work of the protective officers, we would add that there were some 940 traps in the various lots offered in the sale held in September 1938.

The following is a summary of the confiscated articles offered at this sale. Shotguns 67, rifles 45, .22 rifles 106, fishing poles 39, miscellaneous items 34, traps 940. When it is remembered that in almost every case a fine or alternative gaol sentence was imposed, in addition to the loss occasioned by the confiscation of equipment, it should be a stern warning that "the way of the transgressor is hard!"

For several days in February, 1939, the Department vault and storage room resembled a fur warehouse. Exposed for the inspection of buyers was the largest collection of confiscated pelts the Department has ever handled in any one year. This collection included the following pelts:—

Beaver	993	Mink	35
Muskrats	778	Weasel	96
Fisher	3	Squirrel	87
Lynx	2	Raccoon	62
Otter	14	Skunk	2
Fox (cross)	9	Wolves	3
Marten	14	Fox (red)	25

In addition to this record assortment of confiscated furs there was a collection of silver fox pelts together with some red fox and mink from the Fur Farm, and a small mixed group taken in Provincial Parks and included by the Department of Lands and Forests.

For the benefit of prospective buyers the furs were open to inspection for four days, and during that period they were constantly being turned over, examined and appraised by keen-eyed, shrewd buyers. Bidding for the various lots was in the form of sealed tender, so that those interested had to go over them carefully and determine finally what they were worth to them in a competitive market. The result of the sale surpassed the expectations of the Department and added considerably to the annual revenue. For example, the 993 beaver pelts brought a total of \$14,535.

while the balance of the seized furs sold for \$1,700.85. The confiscated furs therefore brought a total of \$16,235.85.

Around this brief mention of the fur sale is a story of never-ending vigilance on the part of the field force; that silent but effective group of Overseers whose mission is to enforce the Game and Fisheries Laws and see that the wild life resources of the Province are protected from the pilfering propensities of the poacher. A glance at the summary of confiscated pelts given herein will convince the most indifferent that there is a real necessity for such keen watchfulness. Take the case of the beaver for example. These animals were destroyed during a year when there was a completely closed season on beaver, and in addition a large percentage of them had been purchased from poachers by unscrupulous fur buyers, who, in turn, would be forced to dispose of them by further dishonest manipulations. The irony of these extensive seizures of beaver pelts is that the season was closed because it was felt that the animals required protection against trapping for a period, in order to increase their numbers, and the good trapper, realizing that such a measure was in his own interest, respected the restriction. The poacher, on the other hand, apparently found in the restriction an opportunity to enlarge his activities, aided and abetted by certain irresponsible buyers.

As showing the widespread nature of these illegal practices we mention the fact that 80 beaver came from the Patricia District; 41 from Algoma; 17 from Renfrew and 51 were seized in Toronto. The balance in small numbers came from all over the Province.

The same general remarks apply with regard to the other furs. They were seized for a variety of reasons, but in all cases breaches of the act were involved.

It is but fair to add that, despite this tale of unlawful taking, the score is not all bad. It has been noted, for example, that some 32 beaver accidentally caught in traps set for other legal fur, were forwarded to the Department for disposal, by the trappers themselves.

Notwithstanding the fact that the general public is becoming more informed on the value of wild life and the necessity for ensuring its conservation the poacher and the illegal taker are still in our midst.

As a result of the vigilance of protective officers we find that during the year under review there were some 1709 cases of violations prosecuted through the Courts, and in 1581 of which cases convictions were registered and fines collected totalling in all the record sum of \$26,245.40.

An analysis of these cases shows that Game and Fisheries Overseers were responsible for the charges in 1510 instances, members of the Provincial Police Force in 98 cases, Deputy Game Wardens in 21 cases; while co-operative action was responsible in 80 cases. Particulars of some of the more glaring cases which were prosecuted through the year are as follows:

- (a) Illegal trafficking in partridge, in the County of Carleton, convicted and fined \$1,000 and costs;
- (b) Illegal possession, sale and purchase of partridge, in the County of Carleton, three persons involved, convictions registered in all cases, total fines of \$400 and costs;
- (c) Illegal trafficking in pheasants, in the County of Middlesex, 34 birds seized, convicted and fined \$340 and costs;
- (d) Unlawful killing of Hungarian partridge, in the County of Wentworth, 10 birds seized, convicted and fined \$100 and costs;

- (e) Possession of more than legal catch of pheasants, on Pelee Island, 16 birds seized, convicted and fined \$160 and costs;
- (f) Taking excessive numbers of undersized speckled trout, in the District of Parry Sound, five persons apprehended,—convicted, penalties in all totalled \$123.75;
- (g) Taking excessive numbers of undersized speckled trout, in the County of Renfrew, three persons apprehended,—convicted, total penalties in each of the three cases \$126.75; and
- (h) Illegal possession of beaver, involving a licensed fur dealer, in Northern Ontario,—23 charges, convicted and fined a total of \$16,395 or in default of payment to be confined for two years and six months, less one day in a Reformatory. In addition to this sentence there were seized from the offender, 444 beaver, 10 otter, 7 marten, 1 fisher, 2 mink, 2 cross fox and 31 muskrat.

We ask the sportsmen to notice two things in connection with these various offences. The first is that no stone is being left unturned by the Department to bring the law-breakers to justice. The second is that illegal depredations, if unchecked, may assume extensive proportions; as is evidenced by details of the cases above noted.

THE FISH CULTURE BRANCH

The vast waters of our Province, among the finest in the world, constitute our most widely distributed recreational agencies, and their importance from the recreational and health standpoints is of immeasurable value to our people. This attraction lies in the entrancing beauty of our lakes and streams, and the excellent fishing which they provide. The development and maintenance of these game fishing interests in a practical manner is one of the primary functions of the Department.

Ontario's commercial fishing industry is also of considerable economic importance, and in point of annual marketed value of fresh water fish, Ontario stands first among the Provinces. In appendices 3 and 4, information pertaining to this valuable enterprise is compiled for reference purposes.

In its wider and truer meaning fish culture is closely linked to aquatic biology, physics, commercial fishing and angling, and it is difficult to give a comprehensive definition of the term. However, for all practical purposes it may be said that a progressive fish culturist is one who measures his success in terms of the good fishing resulting from his labours, and in view of the results being achieved in this connection fish culturists should be very optimistic about future possibilities in this field.

During the regular open seasons there is a tremendous drain on the fish supply, particularly in the more populated areas where waters are more readily accessible. The menace of over-fishing which is one of the major causes of depletion has become more seriously apparent since the development of the automobile and motor boat; these two useful contrivances have made it possible for a much larger percentage of the population to go fishing. In view of these conditions, a practical restocking policy is followed by such regulations and practical measures as are consistent with the conservation of the fisheries. The eminently reasonable aim of fish laws is to ensure a plentiful supply of commercial and game-fish to future generations of Canadians.

Conservation means wise use. Fish do not grow by magic and in order to obtain larger and better fish, they must be permitted to grow and reproduce normally;

nature is wonderfully endowed with recuperative powers and, if given a chance, it is surprising how quickly fish will multiply under properly balanced conditions of food and shelter. On the other hand, if a suitable number of adults is not left to reproduce we should not be surprised to find an increase of undesirable species. It is wise for fishermen to remember that a body of water produces a definite number of adult fish, depending on the food, natural enemies and possibilities of reproduction. Fishermen generally are beginning to realize the importance of this fundamental factor and many are content with the minimum, rather than the maximum creel limit.

Within the compass of this report the salient features of the progress made during the year in connection with fish cultural practice are set forth.

HATCHERIES AND REARING STATIONS

During the year the Department operated twenty-six hatcheries and rearing stations. The actual number of hatcheries operated was twenty; trout rearing stations, fifteen; and bass rearing stations, five.

New and additional facilities for hatching and rearing fish during the fiscal year 1938-39 were provided for in a very satisfactory manner as follows:

1. Additional raceways were constructed at the Dorion trout rearing station, Thunder Bay district, to increase the carrying capacity of the hatchery.

2. A trout rearing station subsidiary to the Glenora fish hatchery was operated on Waring's creek, Prince Edward county.

3. Two additional ponds were constructed at the Chatsworth trout rearing station and a subsidiary station was developed on Nicholson's creek, in the same vicinity.

4. Construction of a new trout rearing station at Hill's Lake, vicinity of Charlton, district of Temiskaming, was commenced.

5. Three additional bass ponds, making a total of five, were completed at Sandfield, Manitoulin Island; four of these ponds were used for wintering trout in 1938-39.

6. Five bass ponds and a pickerel hatchery were constructed at Skeleton lake, vicinity of Ullswater, Muskoka district; four of these ponds were used for wintering trout in 1938-39.

7. Three ponds were completed at Deer lake, vicinity of Havelock, Peterborough county, for the rearing of black bass, maskinonge and forage fish; a hatchery for maskinonge and pickerel was also completed at this site. Two of these ponds were used for wintering trout in 1938-39.

THE CULTURE AND DISTRIBUTION OF FISH

Speckled Trout:

The policy of rearing large numbers of trout to yearling and older stages for distribution to suitable public waters which require restocking was vigorously pursued. The following comparative distribution figures show the successful results obtained and the definite progress that is being made:

1936	557,270
1937	1,167,073
1938	2,083,538

In addition, 373,314 fingerlings were planted, slightly fewer than the number planted the previous year. The policy of planting fry and small fingerlings will be abandoned, unless a surplus is available or crowded conditions warrant distribution.

Brown Trout:

The Department continued the policy of rearing brown trout yearlings for restocking suitable streams in southern Ontario, and the results are most encouraging.

During the year approximately 59,600 sizeable yearlings were planted and plans are under way for increasing facilities for handling larger numbers of this species.

Rainbow Trout:

(a) Steelhead trout—

Excellent progress was made in connection with the rearing of rainbow trout fingerlings; an increased production of 205.5 per cent was obtained. In addition to this 6,727 yearling and adult rainbows were distributed.

(b) Kamloops trout—

The advantages to be derived from planting this variety of rainbow trout in spring fed lakes, which show similar characteristics to those inhabited by speckled trout, were set forth in the previous report of the Department.

Twenty-five thousand eight hundred fingerlings of this variety were planted during the year. As soon as a plan can be developed, a substantial number of yearlings will be planted annually in conjunction with surplus fingerlings which cannot be carried over winter. Annual egg production will depend on a domesticated breeding stock which is being developed.

Lake Trout:

The total distribution of eyed eggs and fry was approximately 28 per cent greater than the previous year. There was a decrease of 33 per cent in the distribution of fingerlings.

The successful collection of large numbers of lake trout eggs in the fall of the year by commercial fishermen working in conjunction with the Department's spawntaking crews, depends primarily on weather conditions. It is obvious that the technique governing the successful collection of spawn cannot be carried out in a most satisfactory manner during rough and stormy weather on the Great Lakes. Conditions of this nature existed during the spawning season of lake trout in 1938.

Whitefish:

There was a decrease of approximately 15.6 per cent in the distribution of whitefish fry as compared with that of the previous year; this was due to two factors, firstly the spawntaking harvest in the vicinities of Kenora and Fort Frances was greatly reduced on account of an early freeze-up, and secondly the spawning run of fish in the Bay of Quinte area, Lake Ontario, was much smaller than in previous years.

Herring:

The distribution of herring fry was more than nine times that of the preceding year. This distribution was due in the main to the increased collection of spawn on the Bay of Quinte area, Lake Ontario. Small collections were made on Lake Erie but, as was pointed out in the previous year's report, there are many hopeful signs of the return of the herring or cisco in Lake Erie. The reason for this may be ascribed, in part at least, to the effective legislation imposed and enforced in regard to commercial fishing in this lake. If the present population of herring in

the lake is permitted to spawn once, and preferably twice, before being taken commercially there will, undoubtedly, be a very decided increase in the production of this valuable commercial fish. As was pointed out in the introduction to this report, nature is wonderfully endowed with recuperative powers and if given a chance it is amazing what can be accomplished. Much larger collections of spawn are anticipated in succeeding years.

Yellow Pickerel:

There was an increased distribution of fry amounting to approximately 3 per cent over that of the previous year.

Following the usual practice approximately two million eyed eggs were handled by the Sparrow Lake hatchery, the fry being distributed over suitable areas in Sparrow lake.

Small-mouthed Black Bass:

Although there was a decrease of 37 per cent in the distribution of small-mouthed black bass fry, this was greatly offset by an increase of 19.7 per cent in the distribution of fingerlings.

There was also an increased distribution of yearlings and older bass, amounting to 1,840, as a result of bass harvesting from the following lakes,—Cook's lake (Thunder Bay district), Lake Charlotte (Renfrew county) and Little Gull lake (Haliburton county).

Large-mouthed Black Bass:

Following the practice of previous years, one pond was set apart at Mount Pleasant for the culture of large-mouthed black bass. This pond produced 57,500 fry and 8,035 fingerlings. Since this pond is only 0.64 acres in area, the production record is an excellent one.

Yellow Perch:

During the spawning run of the perch in the spring of the year, spawn is collected by commercial fishermen working in conjunction with our own hatchery. officers. This work is conducted at the west end of Lake Erie near Kingsville. The eggs are cultured in the hatchery in that vicinity and the resulting fry are widely distributed over natural spawning areas in the lake. This work is of the utmost importance considering the commercial value of perch fishing in Lake Erie.

The distribution of perch fry was over six times that of the previous year, due to a much larger spawning run of this desirable species in the vicinity in question.

Blue Pickerel:

The blue pickerel is of considerable commercial value in Lake Erie and it is desirable to supplement the work of nature in maintaining production on a proper basis. For the second season spawn was collected at the west end of Lake Erie and approximately one-half million blue pickerel fry were liberated.

Maskinonge:

The distribution of maskinonge fry was approximately 376.5 per cent greater than the previous year.

The difficulties attending the collection of spawn and the culture of this important species were pointed out in the previous year's report. This report also gave an outline of the work being done by New York, Wisconsin and Minnesota along similar lines. The ways and means by which the Department is undertaking to maintain this important species are,—

1. Restriction of bag limit and number of days' fishing.
2. Protection of the normal population in sanctuary areas. The report for 1936-37 contains an explanation of the purpose of such sanctuaries.
3. The planting of fry in suitable areas.
4. Further studies regarding the possibilities of rearing fry to the fingerling stage.

With reference to item 4. facilities will be provided during the next fiscal year to experiment on a proper basis with the culture of maskinonge from the fry to the fingerling stage. For this purpose, a hatchery and pond have been constructed at the outlet of Deer Lake, Belmont township, Peterborough county. The water supply is adequate and of suitable composition. A minnow pond for the production of forage fish for the growing maskinonge is also available at this site.

In addition to this, a large natural area will be set aside in the Kawartha lakes district for the purpose of studying in an experimental way the conditions required for the successful propagation of maskinonge in natural areas.

CLOSED WATERS

In addition to the waters already closed for the natural protection and propagation of fish, the following water areas were closed during the year, April 1, 1938, to March 31, 1939:

BERRY CREEK, tributary to Long Bay, Lake of the Woods, District of Kenora.

BLACK DUCK LAKE,

Township of Harvey, County of Peterborough.

CHEMONG LAKE (Portion)

Township of Emily, County of Victoria.

CHEMONG LAKE (Portion)

Township of Smith, County of Peterborough.

DUCK PONDS,

Township of Dummer, County of Peterborough.

GOOSE LAKE,

Township of Fenelon, County of Victoria.

GOOSE LAKE,

Townships of Fenelon and Somerville, County of Victoria.

KATCHIWANO LAKE.

Township of Smith, County of Peterborough.

LITTLE MUD LAKE (Chemong Lake)

Township of Smith, County of Peterborough.

McVICAR'S CREEK,

Within limits of city of Port Arthur, Thunder Bay District.

SEARIGHT'S BAY (North River),

Township of Belmont, County of Peterborough.

SOUTH BAY (Stony Lake),

Township of Dummer, County of Peterborough.

TAYLOR'S BAY and MUNN'S BAY (Belmont Lake),

Township of Belmont, County of Peterborough.

WHITEFISH, BASS and CLEAR LAKES,

Township of Humphrey, District of Parry Sound, during the period January 23, 1939, to April 30, 1939.

REMOVAL OF COARSE FISH

Between December 16, 1938, and February 4, 1939, twenty-seven hoop nets were operated for the removal of ling from waters located as follows:

- (a) In Leeds County—Rideau Lake, Bass Lake, Red Horse Lake, Outlet of Charleston Lake and Barker's Creek.
- (b) In Lanark County—Bennett's Lake and the Tay River.

The total number of ling taken was 3,305; the average weight of the ling was 6 pounds, making the total weight of ling removed 19,830 pounds, or approximately 10 tons.

BIOLOGICAL SURVEYS

Biological surveys were conducted in Thunder Bay district on Northern Light lake, located approximately twelve miles south of Moss township, on the Pigeon river, Whitefish lake (Strange township), Arrow lake, located approximately six miles south-west of Strange township, and Shikag lake, which is located about seven miles north-east of Tannin. The purpose of these studies was to determine the advisability of permitting commercial fishing on these lakes. Studies were conducted on the following waters, with a view to determining their suitability as sanctuaries for black bass, namely,—Hart lake, Stonehouse lake, Upper Rock lake, Lower Rock lake, located in the township of Storrington, Frontenac county; Crow lake (Crow's Nest lake) and Lake Opinicon, township of South Crosby, Leeds county; and a water area in the vicinity of Portland, Big Rideau lake, township of Bastard, Leeds county.

Dams on the Beaver river, township of Collingwood, Grey county, and at the outlet of West Lake, township of Hallowell, Prince Edward county, were examined with reference to the obstructions created by these dams to migratory fish, and the biological effects resulting from changing water levels in the latter instance.

Pollution surveys were conducted on a branch of the Aux Sables river, township of Usborne, Huron county; Smith creek, township of Blenheim, Oxford county, and the St. Lawrence river, vicinity of Cornwall, Stormont county.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, continued field and laboratory studies of lakes and streams in Algonquin Park during 1938-39, and the following is a concise account of this important work:

"The anglers fishing in the Park have cooperated by supplying a record of the fish which they caught. Such information is now available from a good many lakes for the last four years.

Year	1936	1937	1938	1939
Number of lakes for which anglers have reported ..	23	51	41	59
Number of lake trout recorded	1414	3856	3083	4681

In addition to recording the number of fish caught, the anglers also report the size of the fish and the length of time it takes to catch a given number. It was found that the length of the lake trout caught varied from a minimum of eight inches

to a maximum of thirty-six inches. In some lakes the lake trout are mostly small and in other lakes there is a preponderance of large trout, while still other lakes contain trout varying in size from small to large. The size and number of trout in a lake is related to the available food and the amount of fishing. This information which has been made available as a result of the cooperation of the anglers and the biological investigations of these lakes has made possible the carrying out of experiments of value in fish culture.

In these lakes where the food scarcity is the controlling factor arrangements are being carried out to improve the food condition by introducing small food fish. In those lakes where excessive fishing is depleting the stock of lake trout, two kinds of experiments are being undertaken. In lakes adjacent to the highway or in the vicinity of cottages trout of different sizes are being planted and the result of this stocking will be determined. Some lakes which are remote from the highway are being closed to fishing in alternate years and the improvement in fishing resulting from this closure is being measured during the years in which those lakes are open to angling.

It is most desirable to have definite information on the trout population in lakes. The particular relationship of White lake to Big Trout lake in Algonquin Park makes it possible to ascertain the trout population of White lake for at least part of the year. These two lakes are joined by a narrow channel 100 feet wide and about 12 feet deep. White lake with an area of 1040 acres and a maximum depth of 40 feet has lake trout in it during the fall, winter and spring. As it warms up during the summer, the lake trout all move out into Big Trout lake which is much deeper. In the spring and early summer of 1939 all of the lake trout moving out of White lake were captured in a fyke net, measured, and released into Big Trout lake. By July 10 all of the lake trout had moved out. There were 813 between twelve and twenty-eight inches in length, with a total weight of about 2177 pounds. Thus White lake with an area of 1040 acres supports about one lake trout of fishable size per acre or about two pounds of available lake trout per acre.

The young speckled trout in Algonquin Park waters live in the stream during the early part of their lives. Here they feed upon aquatic insects. Studies of these insect populations have given astonishingly large numbers for the production of this trout food. From May 17 to September 11, 1939, one square yard of water in a typical trout stream inhabited by trout was found to produce during the summer 550 mayflies, 700 stoneflies, 466 caddis flies and 4,400 blackflies and midges, as well as some other aquatic insects, all of which constitute excellent trout food.

Bass from some lakes and rivers in the Park have fish parasites. None of the fish parasites are injurious to man but they are unpleasant for the angler to find while cleaning the fish. A study of the distribution of these parasites has been carried out to find where they occur most abundantly. With this information at hand the danger of transferring parasites from one body of water to another can be reduced to a minimum.

A small hatchery has been established near Algonquin Park headquarters, where fish which have been raised in the rearing stations of the Ontario Department of Game and Fisheries may be held for some time and from where they may be conveniently distributed to any desired water in the Park."

ACKNOWLEDGMENTS

The assistance and co-operation rendered during the year, particularly by Fish and Game Protective Associations and members thereof, have indeed been very

gratifying and are deeply appreciated. Such valuable cooperation encourages us in our efforts on behalf of the protection and development of the wild life natural resources of the Province, in order that those interested may continue to enjoy a participation in the privilege and healthy exercise which pursuit of the same provides.

Members of the Staff, both the inside and outside service, generally speaking, have conducted themselves and performed the duties assigned to them in the best interests of the Department and its varied activities.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

Toronto 2.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939

LARGE-MOUTHED BLACK BASS		Saugeen River		9,000
FRY		Shouldice Lake		10,000
Bruce:				
Berry's Lake	5,000	Frontenac:		
Little's Lake	5,000	Clear Lake (Kennebec)	10,000	
Marl Lake	5,000	Collins Lake	5,000	
Paddy's Lake	5,000	Cross Lake (Kennebec)	5,000	
Seep's Lake	5,000	Little Mississagagon	5,000	
Grey:				
Davis Lake	5,000	Loughborough Lake	15,000	
Saugeen River—S. Branch ..	5,000	McClintock Lake	10,000	
Sheppard's Lake	5,000	Mississagagon Lake	10,000	
Haliburton:				
Round Lake	5,000	Pine Lake	5,000	
Lincoln:				
Jordan Pond	2,500	Rideau Lake	10,000	
Muskoka:				
Kahshe Lake	5,000	Schooner Lake	10,000	
Norfolk:				
Sutton's Pond	5,000	Sharbot Lake	10,000	
FINGERLINGS				
Middlesex:				
Sydenham River	126x	Trout Lake	10,000	
Nipissing:				
Blackwater Lake	500	Twin Lakes	5,000	
Norfolk:				
Hunger Lake	100	Haldimand:		
Little Lake	100	Grand River	20,000	
Teeterville Pond	210	Haliburton:		
Wentworth:				
Hamilton Bay	5,000	Black Lake	5,000	
York:				
Shadow Lake	2,025	Blue Hawk Lake	10,000	
xThis number includes twenty-six adults.				
SMALL-MOUTHED BLACK BASS				
FRY				
Bruce:				
Arran Lake	5,000	Davis Lake	5,000	
Bereford Lake	10,000	Grass Lake	5,000	
Boat Lake	10,000	Gull Lake	10,000	
Britain Lake	5,000	Head Lake	5,000	
Cameron Lake	2,500	Hurricane Lake	5,000	
Chesley Lake	5,000	Kashawigamog Lake	5,000	
Cyprus Lake	2,500	Long Lake (Dysart)	5,000	
Gould Lake	10,000	Mink Lake	10,000	
Isaac Lake	15,000	Misiwabi Lake	5,000	
Lake George	5,000	Mountain Lake (Minden) ...	5,000	
Miller Lake	20,000	Paradise Lake	5,000	
Pearl Lake	5,000	Pine Lake	5,000	
Sauble River	15,000	Portage Lake	5,000	
Leeds:				
Lincoln:				
Twelve Mile Creek				
2,500				

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1938, to March 31st, 1939—Continued

SMALL-MOUTHED BLACK BASS
 —Continued

Manitoulin:		Desbarats Lake	500
Big Lake	10,000	Diamond Lake	500
Lake Manitou	10,000	Duborne Lake	1,000
Middlesex:		Gordon Lake	500
Thames River	10,000	Keichel Lake	1,000
Muskoka:		Little Bass Lake	1,000
Bon View Lake	20,000	Lost Lake	1,000
Bruce's Lake	10,000	McCarroll's Lake	500
Deer Lake	10,000	Mine Lake	500
Dickie Lake	10,000	Moose Lake	500
Kahshe Lake	10,000	Mud Lake	500
Lake Muskoka	30,000	O'Neill Lake	1,000
MacKay's Lake	10,000	Pipe Lake	1,000
Menominee Lake	20,000	Rock Lake	500
Prospect Lake	20,000	Stuart Lake	1,000
Tookes Lake	10,000	Unnamed lake (U. Tp.)	1,000
Wood Lake	10,000	Walker Lake	1,500
Norfolk:		Bruce:	
Waterford's Gravel Pit Pond	10,000	Clam Lake	1,000
Northumberland:		Carleton:	
Trent River	5,000	Ottawa River	2,000
Ontario:		Rideau River	2,000
Lake St. John	10,000	Cochrane:	
Oxford:		Baart's Lake	1,000
Thames River	10,000	Frontenac:	
Peterborough:		Canonto Lake	1,000
Belmont Lake	5,000	Crotch Lake (Palmerston)	1,000
Stony Lake	5,000	Crow Lake	1,000
Simcoe:		Elbow Lake	1,000
Kempfenfeldt Bay	10,000	Fourteen Island Lake	1,000
Lake Couchiching	15,000	Long Lake (Portland)	1,000
Little Lake (Vespra)	10,000	Rock Lake (Portland)	500
Sparrow Lake	15,000	St. George's Lake	500
Victoria:		Sunday Lake	1,000
Balsam Lake	10,000	Grenville:	
Burnt River	5,000	Rideau River	2,000
Gull River	5,000	Grey:	
Little Mud Turtle Lake	5,000	Lake Francis	500
Mud Turtle Lake	5,000	Haliburton:	
Pigeon Lake	10,000	Canning Lake	1,000
Round Lake	5,000	Koshlong Lake	750
Silver Lake	5,000	Little Mud Turtle Lake	1,000
Sturgeon Lake	25,000	Mountain Lake (Dysart)	750
FINGERLINGS		Hastings:	
Algoma:		Baptiste Lake	1,000
Alma Lake	500	Bass Lake	1,000
Appleby Lake	500	Lake Louis	500
Blind River	1,000	Huron:	
Caribou Lake	500	Maitland River	500
Cummings Lake	1,000	Lanark:	
Darrell Lake	1,000	Bennett's Lake	1,000
		Black Creek	1,000
		Christie Lake	1,000
		Dalhousie Lake	1,000
		Mississippi Lake	2,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Lanark—Continued

Pike Lake	1,000
Rideau Lake	1,500
Silver Lake	500

Leeds:

Gananoque Lake	100
St. Lawrence River	100

Lennox-Addington:

Beaver Lake	1,000
Beaver Lake—south	500
Lime Lake	500
Long Lake	1,000
White Lake	1,000

Manitoulin:

Kagawong Lake	3,000
Lilly Lake	3,000
Linda Lake	3,000
Loon Lake	2,000
Mindemoya Lake	2,000
South Bay	2,000

Muskoka:

Burns Lake	1,000
Henshaw Lake	500
Indian River	500
Lake Joseph	500
Lake Rosseau	500
MacKay's Lake	2,000
Musquash River	500
North Lake	1,000
Silver Lake	500
Six Mile Lake	1,000
Sparrow Lake	1,000
Torrance Lake	1,000

Nipissing:

Bear and Poplar Lakes	500
Cache Lake	500
Champlain Lake	500
Finlayson Lake	500
Herridge Lake	1,000
Lake Nipissing	500
Lake Nosbonsing	500
Lake Timagami	500
Martin River	500
Moore Lake	500
Shanty Bay (Lake Nipissing)	500
Talon Lake	2,000
Tomiko Lake	500
Trout Lake	500
Turtle Lake	500
Wilson Lake	500

Northumberland:

Rice Lake	1,200
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Parry Sound:

Ahmic Lake	500
Arthur Lake	500
Bain Lake	500

Balsam Lake	500
Bass Lake	1,000
Bear Lake	1,000
Beaver Lake	500
Bittern Lake	500
Blackwater Lake	500
Canoe Lake	500
Caribou Lake	500
Clear Lake (Humphrey)	500
Clear Lake (Patterson)	500
Cole Lake	500
Commanda Lake	500
Crane Lake	500
Deer Lake (Ferrie Tp.)	500
Deer Lake (Lount Tp.)	500
Deer Lake (McKenzie Tp.)	500
Deer Lake (Mills Tp.)	500
Deer Lake (Wilson Tp.)	500
Distress River	500
Doe Lake	1,000
Duck Lake	500
Eagle Lake	500
Horseshoe Lake	500
Island Lake	500
Jack Lake	500
Key River	500
Lake of Many Islands	500
Lennon's Lake	500
Little Long Lake	1,000
Loch Urn Lake	500
Long Lake (Ferguson Tp.)	500
Long Lake (Wilson Tp.)	500
Magnetawan River	1,000
Manson Lake	500
Mary Jane Lake	500
McVeety Lake	500
Neighick Lake	500
Pickarel Lake	500
Pickarel River	500
Pigeon Lake	1,000
Pine Lake	500
Portage Lake	500
Rankin Lake	500
Restoule Lake	500
Rosseau Lake	1,000
Ruth Lake	500
Sea Gull Lake	500
Shawanaga Lake	500
Shebeshekong Lake	500
Shoal Lake	500
Snakeskin Lake	500
Spring Lake	500
Star Lake	500
Stormy Lake	500
Toad Lake	500
Trout Lake (Humphrey)	500
Turtle Lake	500
Whitestone Lake	500
Wilson Lake	500
Wolf Lake	500
Wolf River	500
Woodcock Lake	500

Peel:

Credit River	500
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1938, to March 31st, 1939—Continued

SMALL- MOUTHED BLACK BASS
 —Continued

Brant:

Gravel Pit Pond at Scotland 100

Frontenac:

Bob's Lake 100
 Clear Lake (Hinchinbrooke) . 100
 Clear Lake (Kennebec) 40
 Crotch Lake (Kennebec) .. 40
 Dog Lake 100
 Gull Lake 60
 Kashwakamak Lake 25
 Mink Lake 25
 Mississippi River 25
 Otter Lake 50
 Rideau Lake 100
 Sydenham Lake 50

Haliburton:

Elephant Lake 100
 Gull Lake 100
 Koshlong Lake 100

Hastings:

Big Salmon Lake 50
 Burnt Lake 25
 Dickey Lake 38
 Gull Lake 50
 Jordon Lake 50
 Kaministiquia Lake 100
 Lake of Islands 30
 Parker Creek 100
 West Lake 100
 York River 100

Huron:

Maitland River 20

Kenora:

Lake Agimac 140
 Lake McNamara 135

Kent:

Lake St. Clair (Mitchell's Bay) 100
 Rondeau Bay 70

Leeds:

Big Rideau Lake 100
 Charleston Lake 200
 Crosby Lake 100
 Grippen Lake 100
 Little Rideau Lake 100
 Newborough Lake 100
 Sand Lake 100
 St. Lawrence River 100
 Traynor Lake 100

Lennox-Addington:

Cedar Lake 100
 Otter Lake 50
 Weslemkoon Lake 50

Peterborough:

Black Lake 100
 Buckhorn Lake 100

Prince Edward:

Consecon Lake 500
 Roblins Lake 1,000
 West Lake 1,200

Renfrew:

Black Bay 2,000
 Foster Lake 500
 Green Lake (Radcliffe) 500
 Hyde's Bay 1,500
 Lake Dore 1,000
 LeClaire Lake 1,000
 Madawaska River 1,000
 Mink Lake 1,000
 Ottawa River 2,000
 Petawawa River 2,000

Simcoe:

Bass Lake 500
 Gloucester Pool 500
 Little Lake (Tay) 500
 Nottawasaga River 500
 Severn River 1,500

Sudbury:

Agnew Lake 3,000
 Devils Lake 500
 Dry Pine Bay 500
 French River 500
 Lake Penache 3,000
 Ramsay Lake 3,000
 Wanapitei Lake 3,000
 Whitson Lake 2,000

Timiskaming:

Babs Lake 1,500
 Butler Lake 500
 Davis Lake 500
 Emerald Lake 500
 Granite Lake 500
 Sesekinika Lake 1,000

Victoria:

Lake Dalrymple 500

Waterloo:

Conestoga River 1,000
 Grand River 600
 Paradise Lake 600

York:

Lake Simcoe 1,000
 Musselman's Lake 500

YEARLINGS AND ADULTS

Algoma:

Friendly Lake 120
 Gravel Lake 150
 Knob Lake 150
 Picnic Lake 145

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SMALL-MOUTHED BLACK BASS

—Continued

PETERBOROUGH—Continued

Chemong Lake	100
Clear Lake	100
Crab Lake	100
Deer Bay	100
Indian River	100
Jack's Lake	100
Katchewanooka Lake	100
Little Cedar Lake	100
Long Lake	100
Loon Lake	200
Lovesick Lake	100
Sandy Lake	100
Stony Lake	100
Trout Lake	100
White Lake	100

Renfrew:

Calabogie Lake	100
Corry Lake	100
Green Lake (Horton)	175
Moccasin Lake	100
White Lake	100

Stormont:

St. Lawrence River	200
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Thunder Bay:

Gull Lake	150
Hazlewood Lake	190
Island Lake	150
Loon Lake	150
One Island Lake	165
Shebandowan Lake	220
Williams Lake	50

Victoria:

Sturgeon Lake	100
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MASKINONGE

FRY

Frontenac:

Sydenham Lake	15,000
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Hastings:

Crow Lake	25,000
Crow River	25,000
Moirs Lake	25,000
Moirs River	25,000
Sears Lake	10,000
Trent River	25,000

Leeds:

St. Lawrence River	10,000
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Muskoka:

Kahshe Lake	15,000
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Nipissing:

Lake Nipissing	10,000
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Shanty Bay—south arm

Lake Nipissing	5,000
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Northumberland:

Crow Bay	20,000
Mud Lake	50,000
Rice Lake	100,000
Trent River	115,000
Unnamed Stream at Cod- rington	10,000

Parry Sound:

Naskoten Lake	5,000
Nipissing Lake	5,000
Restoule Lake	5,000

Peterborough:

Belmont Lake	50,000
Buckhorn Lake	50,000
Chemong Lake	50,000
Clear Lake	290,000
Deer Bay	50,000
Indian River	40,000
Katchewanooka Lake	40,000
Little Lake	15,000
Little Mud Lake	25,000
Lovesick Lake	50,000
Otonabee River	50,000
Pigeon Lake	50,000
Round Lake	25,000
Stony Lake	75,000
Trent River	10,000
White Lake	25,000

Prince Edward:

Bay of Quinte	30,000
Muscote Bay	55,000
West Lake	10,000

Renfrew:

Corry Lake	5,000
Cushene Lake	5,000
Lafleur Lake	5,000
Maskalonge Lake	5,000

Simcoe:

Gloucester Pool	25,000
Lake Couchiching	25,000

Stormont:

St. Lawrence River	10,000
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Thunder Bay:

Lac des Mille Lacs	5,000
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Victoria:

Balsam Lake	50,000
Burnt River	25,000
Dalrymple Lake	15,000
Little Mud Turtle	10,000
Mud Turtle Lake	10,000
Pigeon Lake	150,000
Pigeon River	100,000
Sturgeon Lake	50,000
Young's Lake	15,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1938, to March 31st, 1939—Continued

MASKINONGE—Continued**Welland:**

Niagara River 5,000

PERCH**FRY****Norfolk:**

Waterford Gravel Pit Pond. 150,000

Great Lakes:

Lake Erie 59,000,000

PICKEREL FRY**Algoma:**

Appleby Lake 50,000
 Bright Lake 700,000
 Clear Lake 250,000
 Cummings Lake 250,000
 Desbarats Lake 150,000
 Echo Lake 12,880,000
 Gordon Lake 2,000,000
 Little Bass Lake 250,000
 Little Basswood Lake 500,000
 Little Clear Lake
 (Gladstone) 300,000
 Little Clear Lake
 (Kirkwood) 500,000
 Mississagi Lake 1,000,000
 Portlock Bay 50,000
 Rock Lake 500,000

Brant:

Grand River 250,000

Bruce:

Boat Lake 250,000
 Chesley Lake 387,500
 Gould Lake 100,000
 Isaac Lake 125,000
 Sauble River 250,000
 Saugeen River 325,000
 Teeswater River 100,000

Carleton:

Constance Bay 200,000
 Ottawa River 400,000
 Rideau River 450,000

Cochrane:

Big Water Lake 100,000
 Bobs Lake 200,000
 Boulder Lake 100,000
 Boundary Lake 100,000
 Charlebois Lake 200,000
 Mooseen Lake 100,000
 Mortimer Lake 200,000
 Reid Lake 200,000
 Remi Lake 400,000
 Sand Lake 100,000
 Small Lake 100,000
 Unnamed lake—O'Brien Tp. 150,000
 Wilson Lake 200,000

Durham:

Lake Scugog 500,000

Frontenac:

Big Gull Lake 500,000
 Bobs Lake 500,000
 Clear Lake 500,000
 Crow Lake 250,000
 Elbow Lake 100,000
 Fifth Lake 250,000
 Fourteen Island Lake 300,000
 Green Lake 250,000
 Jack's Lake 100,000
 Kashwakamak Lake 1,250,000
 Long Lake (Olden) 100,000
 Long Lake (Portland) 300,000
 Malcolm Lake 250,000
 Marble Lake 250,000
 Mink Lake 250,000
 Mississagagon Lake 500,000
 Mississippi River 1,250,000
 Morgan Lake 150,000
 Navy Bay 250,000
 Norway Lake 250,000
 Rock Lake (Portland) 300,000
 Salmon River 150,000
 Sydenham Lake 350,000
 West Rideau Lake 500,000

Grenville:

Nation River 1,000,000
 Rideau River 1,250,000

Haldimand:

Grand River 250,000

Haliburton:

Clear Lake 250,000
 Sam's Lake 250,000

Hastings:

Baptiste Lake 650,000
 Fraser Lake 200,000
 Jack Lake 100,000
 Lake Louis 200,000
 Lime Lake 100,000
 Mallard's Lake 200,000
 Moira Lake 1,250,000
 Moira River 1,250,000
 Moxam's Lake 100,000
 Trent River 1,250,000
 York River 100,000

Kenora:

Big Vermilion Lake 1,000,000
 Black Sturgeon Lake 1,250,000
 Blindfold Lake 1,250,000
 Bowden Lake 1,000,000
 Cache Lake 500,000
 Lake of the Woods 22,150,000
 Lake of Two Mountains ... 1,000,000
 Long Bow Lake 1,250,000
 Mack Lake 1,250,000
 Marchington Lake 1,000,000
 Separation Lake 1,000,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

PICKEREL FRY—Continued**KENORA—Continued**

Spruce Lake	1,000,000
Wabigoon Lake	1,000,000
Winnipeg River	1,000,000

Lanark:

Bennet's Lake	650,000
Black Lake	300,000
Christie Lake	650,000
Dalhousie Lake	800,000
Fournier Mud Lake	100,000
Long Lake	150,000
Lower Rideau	500,000
Mississippi Lake	200,000
Otty Lake	600,000
Patterson's Lake	100,000
Pike Lake	300,000
Rivens Lake	100,000
Widow's Lake	150,000

Leeds:

Bass Lake	600,000
Crosby Lake	500,000
Devil's Lake	150,000
Green Lake	650,000
Higgle Lake	250,000
Little Rideau Lake	1,250,000
Sand Lake	500,000
St. Lawrence River	2,000,000
Traynor Lake	250,000

Lennox-Addington:

Beaver Lake	500,000
Cedar Lake	400,000
Clare River	750,000
Douglas Lake	150,000
Long Lake	400,000
Mazinaw Lake	800,000
Napanee River	2,500,000
South Beaver Lake	450,000
White Lake	400,000

Lincoln:

Twelve Mile Creek	250,000
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Manitoulin:

Falls, and Burnett Lake ...	150,000
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Muskoka:

Allen's Lake	150,000
Axel's Lake	150,000
Bigelow's Lake	150,000
Brandy Lake	200,000
Buck Lake	200,000
Duck Lake	150,000
Gull Lake	300,000
Kahshe Lake	300,000
Lake Muskoka	1,900,000
Long Lake	150,000
Mootes Lake	150,000
Severn River	250,000
Six Mile Lake	250,000
Sparrow Lake	eggs 2,012,500

Spence Lake	150,000
Three Mile Lake	300,000

Nipissing:

Bebees Lake	100,000
Bruce Lake	100,000
Champlain Lake	250,000
Finlayson Lake	200,000
Lake Nipissing	500,000
Lake Nosbonsing	400,000
Lake Timagami	800,000
Little Martin Lake	100,000
Marten Lake	150,000
McPhee Lake	100,000
Talon Lake	600,000
Tilden Lake	350,000
Tomiko Lake	500,000
Upper French River	500,000
Wassi Lake	300,000
Wickstead Lake	100,000

Northumberland:

MacKenzie Channel	1,250,000
Pickrel Bay	1,250,000
Presqu'ile Bay	100,000
Rice Lake	1,250,000
Trent River	6,250,000

Ontario:

Lake St. John	200,000
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Oxford:

Lakeside Lake	250,000
Lake Lisgar	200,000

Parry Sound:

Ahmie Lake	300,000
Bass Lake	100,000
Caribou Lake	200,000
Cecebe Lake	250,000
Clear Lake	100,000
Commanda Lake	200,000
Crane Lake	200,000
Deer Lake (Ferrie)	200,000
Deer Lake (MacKenzie) ...	250,000
Doe Lake	200,000
Duck Lake	100,000
Footes Lake	100,000
Isabella Lake	400,000
Jack Lake (Armour)	100,000
Jack's Lake (Mills)	100,000
Key River	400,000
Lake of Many Islands	200,000
Lake Rosseau	850,000
Lennon's Lake	100,000
Little Long Lake	100,000
Long Lake	100,000
Loon Bay	400,000
Magnetawan River	1,100,000
Manitowaba Lake	200,000
McKeown Lake	100,000
Milton Lake	100,000
Minerva Lake	150,000
Neighick Lake	200,000
Oastler Lake	500,000
Otter Lake	700,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

PICKEREL FRY—Continued**Parry Sound—Continued**

Owl Lake	200,000
Pickereel Lake	200,000
Pickereel River	200,000
Pigeon Lake	100,000
Restoule Lake	200,000
Ruth Lake	200,000
Shawanaga Lake	350,000
Shebeshekong Lake	200,000
Shoal Lake	100,000
Squaw Lake	200,000
Stewart's Lake	150,000
Stormy Lake	100,000
Whitestone Lake	200,000
Wilson Lake	100,000
Wolf River	200,000

Peterborough:

Belmont Lake	1,250,000
Little Cedar Lake	250,000
Little Lake	200,000
Long Lake	1,000,000
Loon Lake	200,000
Otonabee River	800,000
Rice Lake	1,000,000
Trent River	1,000,000

Prince Edward:

Bay of Quinte	33,360,000
Consecon Lake	1,250,000
East Lake	540,000
West Lake	750,000

Rainy River:

Clearwater Lake	5,000,000
Lake of the Woods	1,000,000
One-Sided Lake	2,500,000
Rainy Lake	31,000,000
Sabaskong Bay	4,000,000
Steepprock Lake	1,000,000

Renfrew:

Aird's Lake	250,000
Black Bay	350,000
Blackfish Bay	100,000
Constant Lake	250,000
Cushene Lake	100,000
Golden Lake	250,000
Greenan Lake	200,000
Hurd's Lake	200,000
Joe's Lake	100,000
Madawaska River	1,350,000
Maskalonge Bay	200,000
Meilleur's Bay	100,000
Muskrat Lake	200,000
Ottawa River	250,000
Petawawa River	350,000
Pike Lake	50,000
Round Lake	100,000
Snake Lake	100,000
White Lake (McNab)	550,000
White Lake (Raglan)	250,000
York River	500,000

Russell:

Castor River	1,250,000
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Simcoe:

Gloucester Pool	1,000,000
Little Lake	150,000
Nottawasaga River	100,000
Severn River	375,000
Sturgeon Bay	400,000

Stormont:

St. Lawrence River	1,250,000
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Sudbury:

Agnew Lake	750,000
Birch Lake	250,000
Dry Pine Bay (French River)	1,000,000
LaCloche Lake	750,000
Lake Penache	1,000,000
Long Lake	750,000
Onaping Lake	500,000
Raft Lake	250,000
Ramsay Lake	1,000,000
Unnamed Lake	250,000
Wanapitei Lake	1,000,000
Washagami Lake	1,000,000

Thunder Bay:

One-sided Lake	250,000
Whitefish Lake	500,000

Timiskaming:

Bass Lake	250,000
Gillies Lake	200,000
Gowganda Lake	400,000
Granite Lake	200,000
Hound Chutes	200,000
Kenogami Lake	300,000
Lady Evelyn Lake	200,000
Lake Timiskaming	400,000
Long Lake	400,000
Net Lake	200,000
Ottese Lake	200,000
Portage Lake	200,000
Rib Lake	400,000
Sesekinika Lake	200,000
Sharpe Lake	200,000
Wendigo Lake	400,000

Victoria:

Dalrymple Lake	225,000
Little Turtle Lake	450,000
Long Lake	250,000
Young's Lake	200,000

York:

Lake Simcoe	500,000
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Great Lakes:

North Channel	17,550,000
Georgian Bay	1,000,000
Lake Huron	13,500,000
Lake Ontario	1,350,000

BLUE PICKEREL FRY

Lake Erie	500,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

BROWN TROUT**YEARLINGS AND ADULTS****Brant:**

Gravel Pit Pond	100
Whiteman's Creek	1,000

Bruce:

Crane River	1,200
Lockerby Creek	500
Park Head Creek	400
Plum Creek	700
Saugeen River	1,800
Snake Creek	1,500
Spring Creek	900
Sucker Creek	750
Vogt's Creek	750

Elgin:

Big Creek	1,500
Little Otter	1,400

Grey:

Big Head River	1,200
Keough Creek	300
Maxwell's Creek	600
Potawatami River	900
Saugeen River	6,750
Stony Creek	300
Styx River	2,250
Sydenham River	1,515
Weatherspoon Creek	300

Haldimand:

Rogers Creek	700
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Halton:

Sixteen Mile Creek	500
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Hastings:

Beaver Creek	2,000
Squire's Creek	1,000

Huron:

Nine Mile River	1,200
Wroxeter Dam-Maitland River	200

Middlesex:

Medway Creek	1,000
Pond Mills	1,000

Norfolk:

Young's Creek	300
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Northumberland:

Bowen's Pond	100
Coles Pond	85
Dudley's Pond	100

Ontario:

Chubtown Creek	400
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Perth:

Upper Avon River	1,200
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Peterborough:

Baxter Creek	1,000
Cavan Stream	1,000
Deer Bay Creek	1,000
Eel's Creek	1,000
Jack's Creek	1,000
Mississauga Creek	1,000

Simcoe:

Nottawasaga River	3,400
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Waterloo:

Bridgeport Dam	100
Dentinger Creek	750

Wellington:

Speed River	1,200
Wilson Creek	250

Wentworth:

Bronte River	1,800
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York:

Humber River	7,100
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Sales—Demonstration and propagation purpose

2,592

LAKE TROUT**FRY****Frontenac:**

Brule Lake	20,000
Buckshot Lake	30,000
Camp Lake	10,000
Crow Lake	20,000
Green Lake	10,000
Grindstone Lake	10,000
Kaswakamak Lake	25,000
Loughborough Lake	35,000
Mackie Lake	10,000
Mississagagon Lake	30,000
Mosquito Lake	10,000
Sand Lake	25,000
Schooner Lake	15,000
Trout Lake	25,000
Wolfe Lake	30,000

Hastings:

Bass Lake	10,000
Big Salmon Lake	15,000
Burnt Lake	5,000
Cedar Lake	5,000
Clear Lake	10,000
Devil Lake	5,000
Dickey Lake	20,000
Eagle Lake	20,000
Gunter Lake	10,000
Jamieson Lake	12,500
La Valley Lake	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

LAKE TROUT—Continued

Hastings—Continued

Lake of Islands	10,000
Lake St. Peter	22,500
Little Salmon Lake	5,000
Long Lake (Dungannon) ..	7,500
O'Grady Lake	7,500
Papineau Lake	17,500
Wadsworth Lake	10,000

Lanark:

Rideau Lake	40,000
Silver Lake	15,000

Leeds:

Big Rideau	55,000
Charleston Lake	45,000
Devil Lake	25,000
Lower Beverley Lake	7,500
Red Horse Lake	10,000

Lennox-Addington:

Bark Lake	5,000
Elbow Lake	5,000
Finch Lake	5,000
Little Weslemkoon Lake	20,000
Otter Lake	15,000
Thirty Island Lake	5,000
Weslemkoon Lake	30,000
White Lake	10,000

Peterborough:

Catchacoma Lake	10,000
Gull Lake	10,000
Jack's Lake	10,000
Little Cedar Lake	10,000
Long Lake	10,000
Loon Lake (Chandos)	20,000
Trout Lake (Burleigh)	10,000

Renfrew:

Trout Lake	10,000
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Great Lakes:

Lake Superior	325,000
North Channel	155,000
Lake Huron	6,195,000
Lake Ontario	100,000

FINGERLINGS

Algoma:

Achigan Lake	5,000
Axe Lake	5,000
Basswood Lake	10,000
Belle Lake	5,000
Bull Lake	5,000
Caribou Lake	5,000
Chiblow Lake	10,000
Chub Lake	5,000
Clear Lake (Gould)	10,000
Clear Lake (Scarfe)	5,000
Cooper Lake	10,000
Cummings Lake	10,000

Dalton Lake	25,000
Diamond Lake	4,000
Garden Lake	5,000
Grainery Lake	8,000
Grey Trout Lake	10,000
Hawk Lake	5,000
Hobon Lake	8,000
Howard Lake	5,000
Island Lake (McMahon)	10,000
Jobammeghia Lake	5,000
Lake of the Mountains	15,000
Lonely Lake	10,000
Long Lake	10,000
Long Lake (Patton)	5,000
Martinendale Lake	10,000
McCarroll's Lake	4,000
Megginson Lake	10,000
Patton Lake	10,000
Pickarel Lake	5,000
Rainbow Lake	10,000
Rand Lake	5,000
Ranger Lake	15,000
Raw Hide Lake	5,000
Red Deer Lake	5,000
Rose Lake	5,000
Sand Lake	18,000
Tookenay Lake	25,000
Trout Lake	5,000
Wakomata Lake	10,000
Wawa Lake	5,000

Cochrane:

Remi Lake	10,000
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Haliburton:

Bear Lake (Gullford)	5,000
Big Boskung Lake	10,000
Crooked Lake	20,000
Davis Lake	10,000
Drag Lake	35,000
Eagle Lake	5,000
East Lake	5,000
Gull Lake	20,000
Hurricane Lake	5,000
Kashagawigamog Lake	15,000
Kingscote Lake	2,500
Kushog Lake	10,000
Little Boskung Lake	10,000
Little Hawke Lake	10,000
Mountain Lake	5,000
Oblong Lake	5,000
Redstone Lake	10,000
St. Nora's Lake	10,000
South Bay	5,000
Spruce Lake	5,000
Twelve Mile Lake	20,000

Hastings:

Baptiste Lake	10,000
Kaminisseg Lake	10,000
Limestone Lake	2,500
Long Lake	2,500

Kenora:

Big Vermillion Lake	40,000
Blue Lake	20,000
Cache Lake	20,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

LAKE TROUT—Continued

Kenora—Continued

Crow Lake	25,000
Cut Stone Lake	20,000
Dogtooth Lake	50,000
Gibbi Lake	20,000
Lake of the Mountain	20,000
Lake of the Woods	360,900
Little Vermilion Lake	40,000
Rice Lake	10,000
Rosamond Lake	20,000
Round Lake	10,000
Sturgeon Lake	20,000
Thunder Lake	20,000
Trout Lake	25,000
Willard Lake	50,000

Manitoulin:

Lake Manitou	20,000
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Muskoka:

Bella Lake	10,000
Clear Lake (McLean)	5,000
Clear Lake (Ridout)	5,000
Fairy Lake	25,000
Fox Lake	10,000
Haley's Lake	10,000
Heeney Lake	10,000
Indian River	5,000
Lake of Bays	45,000
Lake Joseph	12,500
Long Lake	5,000
Loon Lake	5,000
Mary Lake	30,000
Muskoka Lake	55,000
Paint Lake	5,000
Peninsula Lake	30,000
Rat Lake	5,000
Rebecca Lake	10,000
Skeleton Lake	20,000
Spring Lake	5,000
Trout Lake	5,000
Vernon Lake	20,000
Walker Lake	10,000

Nipissing:

Cache Lake	3,000
Canoe Lake	3,000
Herridge Lake	10,000
Joe Lake	3,000
Lake of Two Rivers	3,000
Lake Timagami	20,000
Lowell Lake	5,000
McMaster Lake	13,000
Moore's Lake	6,000
Opeongo Lake	2,000
Smoke Lake	3,000
Source Lake	3,000
South Lake (South Tea)	3,000
Talon Lake	20,000
Trout Lake	16,000

Parry Sound:

Bella Lake	10,000
Big Joseph Lake	12,500

Big Loon Lake	5,000
Black Lake	7,500
Davison Lake	10,000
Eagle Lake	15,000
High Lake	7,500
Horn Lake	20,000
Horner's Lake	5,000
Horseshoe Lake	15,000
Lake Memesagamiesi	10,000
Lake Rosseau	20,000
Little Lake Joseph	10,000
Little Whitefish Lake	5,000
Loon Bay	5,000
Lorimer Lake	15,000
Otter Lake	10,000
Ruth Lake	5,000
Salmon Lake	10,000
Spring Lake	10,000
Sucker Lake	15,000
Tea Lake	10,000
Three Legged Lake	10,000
Whitefish Lake	10,000

Peterborough:

Loon Lake (Chandos)	10,000
Sandy Lake	5,000

Rainy River:

Ash Bay	13,800
Bad Vermilion	40,000
Burnt Lake	75,000
Crow Lake	90,000
Eva Lake	20,000
Kishkutena Lake	15,000
Narrow Lake	25,000
Pipestone Lake	75,000
Sphene Lake	30,000
Spring Lake	20,000
Steepprock Lake	40,000

Renfrew:

Bark Lake	6,000
Barry's Bay	2,000
Brewster Lake	10,000
Carson Lake	2,000
Centre Lake	9,000
Cross Lake	8,000
Diamond Lake	10,000
Lake Clear	4,000
Long Lake	10,000
Round Lake	5,000
Schaven Lake	5,000
Tea Lake	2,000
Trout Lake	2,000
Tusaw Lake	2,000
Wadsworth Lake	3,000

Simcoe:

Kempfenfeldt Bay	30,000
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Sudbury:

Birch Lake	8,000
Bull Lake	5,000
Ella Lake	10,000
Geneva Lake	10,000
Lake Agnew	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1938, to March 31st, 1939—Continued

LAKE TROUT—Continued**Sudbury—Continued**

Lake Penache	10,000
Long Lake (Broder)	15,000
Long Lake (Harrow)	10,000
Nelson Lake	10,000
Ramsay Lake	10,000
Second Trout Lake	5,000
Wanapitei Lake	15,000
Windermere Lake	5,000
Windy Lake	10,000

Thunder Bay:

Baril Lake	30,000
Brown Lake	20,000
Lake Nipigon	50,000
Surprise Lake	20,000

Timiskaming:

Anima Nipissing	5,000
Larder Lake	10,000
Montreal River	10,000
Nellie Lake	5,000
Net Lake	5,000
Perry Lake	5,000
Pine Lake	5,000
Rib Lake	15,000
Trout Lake	5,000
Twin Lakes	5,000
Watabeag Lake	10,000

York:

Lake Simcoe	30,000
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Great Lakes:

Lake Superior	3,285,000
North Channel	150,000
Georgian Bay	2,850,000
Lake Huron	1,220,000
Lake Ontario	25,000

EYED EGGS

Exchange	2,437,000
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RAINBOW TROUT**FINGERLINGS****Algoma:**

Batchawana River	3,000
Chippewa River	3,350
Clear Lake	5,000
Garden River	3,000
Huston Lake	5,000
Jobammeghia Lake	500
Keegos Lake	5,000
Mississagi River	10,000
Montreal River	18,000
North Lake	5,000
Serpent River	2,000
Snowshoe Creek	5,000
West Lake	5,000
White River	10,000

Bruce:

Sauble River	10,000
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Dufferin:

Nottawasaga River	17,600
Pine River	10,000

Grey:

Saugeen River	20,000
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Haliburton:

Burnt Lake	20,000
McFadden's Lake	10,000
North Lake	5,000

Muskoka:

Indian River	10,000
Long Lake	10,000

Norfolk:

Black Creek	5,000
North Creek	5,000
Patterson's Creek	5,000
Young's Creek	1,000

Renfrew:

Coldwater River	10,000
Kempenfeldt Bay	10,000
Lake Simcoe & Brough's Creek	30,000
Sturgeon River	20,000

Sudbury:

Nelson River	5,000
Onaping River	5,000
Unnamed Lake— Ermatanger Tp.	5,000
Windermere Lake	5,000

Wellington:

Saugeen River	10,000
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York:

Humber River	10,000
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Sales—Demonstration and propagation purposes

3,150

YEARLINGS and ADULTS**Elgin:**

St. Thomas Reservoir	1,000
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Grey:

Saugeen River	800
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Simcoe:

Sturgeon River	2,600
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Sales—Demonstration and propagation purposes

2,327

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

KAMLOOPS TROUT**FINGERLINGS and ADULTS****Muskoka:**

Waseosa Lake 7,800

Nipissing:

Lake Timagami 4,000

Parry Sound:

Bernard Lake 7,000

Poole Lake 7,000

Miscellaneous:Demonstration and propaga-
tion purposes 21**ATLANTIC SALMON****YEARLINGS****Bruce:**

Gillies Lake 4,800

SPECKLED TROUT**FINGERLINGS****Algoma:**

Batchawana River 6,000

Big Stony Lake 5,000

Blue Lake (1D-1C.) 5,000

Boundary Lake 6,000

Burns Lake (176) 6,000

Carp River 6,000

Chippewa River—north 6,000

Christman Lake 6,000

Fern Lake 3,000

Horseshoe Lake 1,000

Iron River 6,000

Island Lake (Aweres) 12,000

Island Lake (McMahon) 6,000

Little White River 6,000

Loon Lake (Deroche) 6,000

McDonald Creek 1,000

Pancake River 6,000

Robertson Lake 6,000

Root River 6,000

Stony Portage 5,000

Trout Lake (Aweres) 6,000

Unnamed Lake (Lascelles) 1,500

Vixon Lake 3,000

Wartz Lake 6,000

Weashkog Lake 6,000

White Bear Lake 1,000

Durham:

Ganaraska River 3,000

Elgin:

Almond Creek 1,000

Haliburton:

Bear Lake 4,000

Fletcher Lake 4,000

McFadden Lake 4,000

Round Lake 4,000

Muskoka:

Axel's Creek 4,000

Bella Lake 4,000

Bradford Creek 4,000

Clear Lake 2,000

Fax Lake 4,000

Long Lake 4,000

Martin Lake 4,000

Mary Lake 4,000

Muskoka River 4,000

Peninsula Lake 2,000

Rebecca Lake 4,000

Red Chalk Lake 2,000

Rill Lake 4,000

Vernon Lake tributary
creeks 2,000**Norfolk:**

Big Creek 3,000

Kent Creek 3,000

Stony Creek 3,000

Parry Sound:

Clear Lake (Perry) 4,000

Sand Lake 5,000

Renfrew:

Westmeath Creek 614

Simcoe:

Black Creek 200

Thunder Bay:

Allen Lake 1,000

Big MacKenzie River 5,000

Blind Creek 5,000

Brule Creek 2,500

Cedar Creek 2,500

Clegg Lake 1,000

Coldwater River 5,000

Deception Lake 6,000

Elgin Lake 3,000

Gerow Lake 2,500

Half Moon Lake 3,000

Kaministiquia River 10,000

Kenney Lake 2,500

King Lake 2,500

Lake Hilma 1,000

Legault Lake 2,500

Lost Lake 3,000

McIntyre River 6,000

Mileage 5—Cahill 5,000

Mirror Lake 5,000

Moonshine Lake 3,000

Moose Creek 5,000

Neebing River 6,000

Nipigon River 18,000

North Enders Stream 5,000

Pearl River 5,000

Pitch Creek 5,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued**Thunder Bay—Continued**

Thunder Bay	1,000
Trout Creek	5,000
Trout Lake (Stirling)	10,000
Upper Pass Lake	10,000

York:

Sales—Demonstration and propagation purposes	6,000
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EYED EGGS**York:**

Demonstration purposes ...	1,000
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YEARLINGS**Algoma:**

Achigan Creek	2,000	Guest Lake	1,000
Achigan Lake	2,400	Harmony Creek	2,500
Agawa River	4,800	Harmony River	3,600
Alva Lake	1,600	Hawk Lake	1,600
Anjigami Creek	1,600	Hayden Lake	3,000
Arnill Creek	1,500	Hearst Lake	2,500
Aubinadong Lake	2,000	Hoath Lake	500
Austin Lake	1,250	Hobon Lake	2,400
Baker's Lake	1,000	Horn Lake	1,000
Baltimore Lake	1,000	Horse Lake	1,250
Bamagesic Lake	1,600	Horseshoe Lake	1,400
Basswood Lake	3,200	Howard Lake	1,000
Batchawana River	12,000	Hubert Lake	2,400
Birch Lake	1,000	Island Lake (176)	3,000
Blue Lake (near Thessalon)	1,600	Island Lake (McMahon)	5,000
Boundary Lake	1,500	Jackfish River	3,250
Boyles Creek	3,200	Jarvis Lake	2,000
Bridgeland River	5,000	Jimmie Lake	3,200
Burns Lake	2,500	Jobammeghia Lake	1,600
Burnt Island Lake	1,000	Jones Creek	5,000
Burrough's Lake	3,200	Kashawong River	2,500
Caldwell Lake	800	Kelly's Lake	750
Camp 8 Bay	2,000	Khora Lake	2,000
Camp 8 Creek	3,000	Lafee Creek	3,200
Camp Lake	1,000	Lake Maude	1,900
Canoe Lake	1,000	Laughing Lake	2,000
Cedar Creek	1,000	Little Island Lake	8,000
Chiblow Lake	1,000	Little Thessalon River	3,200
Chipman Lake	2,000	Little White River	3,000
Chippewa River North	12,000	Lonely Lake	6,800
Chippewa River South	12,000	Long Lake (Aweres)	3,000
Chub Lake	2,000	Long Lake (Jarvis)	4,000
Clear Lake	4,000	Long Lake (Meredith)	9,800
Coffey Creek	2,500	Loon Lake (Deroche)	1,400
Coldwater Creek	2,000	Loon Lake (Kirkwood)	1,600
Copp Lake	1,000	Loon Lake (24-R.13)	1,600
Crooked Lake	4,000	Loonskin Lake	2,400
Darriel Creek	1,000	Lower Island Lake	4,000
Deer Lake	3,000	Marion Lake	1,250
Devils Lake	2,000	McCormick's Lake	1,600
Echo Lake	1,000	McCrea Creek	2,500
Fern Lake	1,000	McIntyre Lake	750
Garden Lake	4,000	McLeod's Creek	1,250
Goulais River	3,000	McVeigh Creek	1,600
Gravel Lake	5,700	Merchant Lake	1,000
Grey Trout Lake	1,000	Meshagami Lake	2,800
		Michipicoten River	6,400
		Mile 58 Lake	1,600
		Mongoose Lake	2,400
		Moose Lake (Wells)	2,500
		Moose Lake (25-R.13)	2,400
		Mountain Lake (188)	800
		Mountain Lake (McMahon)	500
		Mountain Lake (1-A.U.) ...	2,000
		Mud Creek (Vankoughnet) ...	7,600
		Mud Lake (1.A.)	1,000
		Newcomb's Lake	3,000
		Newt Lake	1,000
		Nixon Lake	1,000
		Obakamiga River	2,000
		Paquette Lake	2,000
		Pearl Lake	600
		Pine Lake (Aweres)	5,500
		Pine Lake (24-R-13)	4,800
		Pine or Prugh Lake (25 R.) ..	1,600
		Pinkney Lake	1,600
		Prospect Lake	3,200
		Rand Lake	1,600

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Algoma—Continued

Ranger Lake	20,800
Rapid River	4,100
Reserve Lake	2,000
Richardson Creek	2,500
Robertson Lake	4,000
Root River	1,000
Round Lake (Aweres)	1,000
Round Lake (1.A.)	1,500
Round Lake (Grassett)	3,200
Sand Lake	2,000
Sand Lake Creek	2,400
Sand River	2,400
Sausabik Lake	1,000
Saymo Bay	1,000
Saymo Lake	4,000
Seventeen Mile Creek	1,250
Shekak River	2,000
Shumka Lake	1,300
Speckled Trout Lake (176) ..	750
Speckled Trout Lake (28-R.16)	800
Speckled Trout Lake (1-A.) ..	1,500
Snowshoe Creek	2,000
Spruce Lake	1,600
Station Lake	1,000
Stokely Creek	9,000
Stony Portage	2,000
Sucker Lake	1,600
Tamarack Lake	800
Tawabinasay Lake	2,400
Tea Lake	1,000
Triple Lake	800
Trout Lake (Aweres)	6,000
Trout Lake Inlet	400
Twin Lakes	6,000
Twin Sister #1	1,500
Two Tree River	2,500
Upper Root River	3,600
Walker Lake	2,500
Wallace Lake	800
Wartz Lake	2,400
Waterman Lake	2,000
Wawa Lake	2,400
Whitewood Creek	1,500
White River	3,000
Woods Creek	2,500
Demonstration purposes ..	150

Bruce:

Big Bay Swamp Creek	400
Colpoys Creek	400
Crystal Lake	900
Curres Creek	900
Gillies Lake	1,500
Hoffart's Neck	1,200
Kirkland's Creek	900
Klondike Creek	750
Silver Stream (Amabel)	1,800
Silver Stream (Carrick) ..	1,400
Spring Creek	1,800
Teeswater River	1,800
Willow Creek	1,400
Wilson's, or Forbes Creek ..	900

Cochrane:

Crooked Creek	800
Dandurant Creek	850
Ferrier Lake	2,200
Hannah Lake	800
Junction Lake	1,000
Legare Creek	1,200
Liniment Lake	1,200
Shaw Creek	1,000
Sheration Lake	1,000
Spring Lake	1,000

Dufferin:

Boyles Creek	500
Butler's Creek	1,800
Caledon Lake	1,800
Cemetery Creek	950
Credit River	1,600
Curtis Creek	1,800
Easson Creek	1,000
Nottawasaga River	3,900
Pine River	3,900
Springbrook Creek	500
Unnamed Stream, Mono. Tp.	1,200

Durham:

Armstrong's Creek	100
Arnot's Creek	2,400
Aude Stream	100
Ball's Stream	100
Beatty's Creek	1,200
Burk's Pond	1,500
Butter's Stream	100
Cain's Creek	2,400
Carscadden Creek	800
Chapman Creek	100
Cowan's Creek	100
Cowper's Creek	800
DeLong's Creek	2,400
Dyer's Stream	1,800
Frew's Creek	300
Ganaraska River	1,000
John Mercer's Pond	600
Leskard Creek	100
Luxton's Creek	1,600
Mountjoy Creek	2,400
Mumfrew's Creek	900
Neal's Creek	100
Powell's Creek	300
Quantreuil's Creek	900
Robbin's Creek	100
Robinson's Creek	100
Roy Mercer's Creek	800
Rowe's Pond	100
Sowden's Creek	1,200
Sowper's Creek	1,600
Squirrel Creek	1,000
Stream above White's Pond ..	900
Thompson's Creek	800
Tyrone Pond	800

Elgin:

Ball Creek	1,500
Bassell Creek	1,000
Beaver Creek	1,000
Buck Creek	1,500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Elgin—Continued

Campbell Creek	500
Clear Creek	4,300
Deer Creek	4,600
Eckert Creek	500
Goodwillie Creek	1,000
Grange Hall Creek	1,500
Howey Creek	500
Leitch Creek	1,000
Synden Creek	500
Wolfe Creek	500

Frontenac:

Beaver Creek	4,800
Black Creek	1,000
Buckshot Creek	2,400
Camp Lake	2,400
Craig's Creek	2,400
Creek entering Buckshot Lake	2,400
Eagle Creek	1,800
Grindstone Lake	4,800
Mallory Creek	4,800
McCausland Lake	4,800
Quackenbush Lake	2,400
Reid's Creek	2,400
Round Lake	312
Sand Lake	2,400
Shibley Creek	1,000
Trout Lake	4,800

Grey:

Anderson's Lake	1,800
Bass Lake	2,500
Beatty Saugeen	3,600
Beaver River	9,450
Bell's Lake	3,600
Bett's Creek	500
Bighead Creek	1,800
Bighead River	4,400
Black's Beach	4,500
Black Creek	1,600
Blind Creek	950
Boyd's Lake	6,400
Boyne River	1,800
Camp Creek	1,400
Caseman's Creek	1,200
Comber's Creek	450
Corlett's Creek	100
Cotter's Creek	900
Craig's Creek	300
Creek in Bentinck Tp.	300
Deer Creek	3,600
Dodsworth Creek	900
Duncan Lake	1,000
Ellis Creek	1,800
English Lake	3,600
Ewart's Lake	1,800
Ferguson's Creek	900
Firth's Creek	1,800
Gagnon's Creek	500
Glen Creek	1,800
Hall's Lake	900
Harbottle Creek	900
Highland Creek	500

Hollinger Creek	900
Howey's Stream	1,950
Hydro Pond	7,800
Lamont's Stream	900
Lawrence Creek	900
Manx Creek	1,800
McCaslin Creek	600
McConnell's Creek	1,200
McCullough Creek	300
McGowan Dam	1,600
McGregor's Creek	900
McIntosh's Lake	1,950
McMullen's Creek	500
Mitchell's Creek	5,850
Mitchell's Pond	500
Moffatt's Creek	900
Munshaw Lake	500
Niemo Creek	1,500
Nigger Creek	3,300
Oxenden Creek	2,800
Parks Lake	900
Priddles Creek	1,950
Rob Roy Creek	1,600
Rocky Saugeen	2,950
Saugeen River	8,200
Schultz Creek	1,800
Spey River	450
Spring Creek (Town of Dur- ham)	900
Spring Lake	1,800
Stream at Markdale	900
Sulphur Springs	200
Sydenham River	29,900
Tannery Creek	900
Townsend's Lake	2,400
West's Creek	1,200
Wilcox Lake	500
Wiley's Creek	1,800
Williams Lake	14,750
Unnamed Stream—Egremont ..	1,800
Unnamed Stream—Glenelg ..	300

Haliburton

Blue Lake	500
Blue Lake River	500
Bones Lake	500
Burnt River	1,400
Deer Lake	800
Dog Lake	500
Drag River	1,000
Eagle Lake River	500
East Lake	2,400
Gull River	1,800
Hawke River	1,000
Hollow Lake	400
Oblong River	1,000
Otter Lake	400
Pine Lake River	400
Portage Lake	900
Raven Lake	400
Red Pine Lake	400
Redstone Lake	1,400
St. Nora's Lake	400
White Trout Lake	400

Halton

Black Creek	900
Ontario Reformatory	500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Hastings

Alexander Creek	2,400
Baptiste Lake	4,800
Barrager's Lake	2,400
Bartlett Creek	2,400
Brett Lake	2,400
Cannon's Lake	5,700
Canoe Lake	1,000
Cedar Creek	4,800
Cockburn Creek	3,000
Deer River	4,800
Diamond Lake	4,800
Eagle Lake	2,400
East Lake	900
Egan Creek	4,800
Faulkner Creek	1,000
Fraser Lake	1,000
Geen's Creek	2,400
Green Lake	4,800
Horseshoe Lake	500
Jardison Lake	2,400
Lake St. Peter	9,600
Little Lighthouse Lake	500
Little Mississippi River	4,800
Long Lake (Herschel)	600
Long Lake (Mayo)	400
McCormick Lake	3,800
McGare Creek	4,800
Mirror Lake	400
Mud Lake	900
Mud Turtle Lake	1,800
Noisy Creek	1,000
Papineau Creek	4,800
Rawdon Creek	4,800
Shaw Lake	1,000
Shire Creek	6,000
Squire's Creek	4,800
Sylvia Lake	4,800
Williams Lake	2,400

Huron

Porter's Creek	1,800
Sharp's Creek	3,600
Spring Creek	1,800
St. Helen's Creek	1,800

Kenora

Cedar Lake	750
Closs Lake	750
English River	1,500
Little Vermilion	5,500

Lambton

Bear Creek	500
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Lanark

Clyde's River	4,800
Murray's Lake	4,800
Musquito Lake	2,400
Paul's Creek	3,800

Lennox-Addington

Brown's Lake	4,800
Burns Lake	2,400

Conner's Lake	2,400
Copeland Lake	2,400
Dafoe Lake	1,000
Enterprise Creek	1,000
Fox Lake	2,400
King Lake	2,400
Long Lake	1,000
MacKenzie Lake	1,000
Mallory Creek	550
Rock Lake (Abinger)	590
Rock Lake (Ashby)	1,500
Shiner Lake	1,000
Smith Lake	2,000
Thirty Island Creek	2,800
Tonawanda Creek	1,000
White Lake	4,800

Manitoulin

Barr's Creek	2,000
Bluejay River	15,000
Bonnie Doone Creek	1,000
Hare's Creek	1,000
Manitou River	17,581
Mindemoya River	15,000
Srigley Creek	3,000

Middlesex

Cody Creek	600
Wye Creek	3,000

Muskoka

Ballantyne Creek	500
Bella Lake	1,800
Big East River	36,000
Deep Lake	4,000
Echo Lake	500
Fairy Lake	4,000
Fraser's Lake	1,200
Gipsy Creek	500
Goose Lake	900
Grindstone Lake	500
Helve Lake	900
Jessops Creek	2,000
Little East River	12,000
Loon Lake	1,800
Loon Lake Creek	900
Muskoka River	7,700
Peninsula Lake	4,000
Round Lake	4,000
Shoe Lake	900
Skeleton Lake	1,200
Vernon Lake	4,000
Wolf Lake	500

Nipissing

Alexander Lake	1,000
Antoine Creek	2,000
Aumond Creek	3,000
Austin Lake	1,400
Balsam Creek	2,000
Bay Lake	1,600
Beaudry Lake	1,400
Blue Sea Creek	5,000
Boulder Tp. Lakes: Boat, Long and Loon	3,200
Bug Lake	1,000
Cauchon Lake	1,000
Cedar Lake	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Nipissing—Continued

Cheney Creek	800
Clear Lake (Antoine)	5,000
Clear Lake (Lyle)	1,000
Clear Lake (near Timagami)	1,200
Crooked Lake	1,000
Crystal Lake	2,400
Devils Lake	1,100
Doran's Creek	2,800
Emerald Lake	1,400
Four Mile Creek	3,000
Green Lake	1,000
Guppy Lake	1,000
Half Mile Lake	1,000
Iron Lake	1,000
Jocko River	15,000
Kioshqua Lake	3,000
Lake Timagami	2,600
Little Cedar Lake	1,000
Little Jocko River	5,000
Loon Lake	1,000
North River	13,200
O'Connell Lake	1,400
Sparks Creek	5,000
Spawning Lake	1,000
Tomiko River	3,200
Twenty Minute Lake	4,800
Ukalet Lake	1,600
Unnamed Creek, running from Clear to Wilfrid Lakes, (Kenny Tp.)	3,200
Unnamed Stream—C.5, on Hurdman Creek	1,000
Unnamed Stream 30 m. S.W. of Timagami	700
White Partridge Lake	1,000
Wolf Lake	1,400

Norfolk

Ball Creek	1,000
Boston Creek	2,100
Cattle Creek	1,800
Ellison Creek	1,800
Glen Creek	1,800
Matthews Creek	2,800
McCool Creek	400
McMichael Creek	1,800
Nanticoke Creek	700
Patterson Creek	800

Northumberland

Baltimore Creek	4,000
Bergman's Creek	4,000
Black's Creek	4,000
Burnley Creek	8,000
Chidley's Creek	100
Dartford Creek	2,400
DeLong's Creek	2,000
Dawson Creek	8,000
Duncan's Creek	1,500
Heffernan's Creek	2,800
Hortop-Prentice Creek	4,000
Little Cole Creek	4,000
Mill Creek	200
O'Grady's Lake	4,000
Piper's Creek	100

Quinn's Creek	2,000
Robin's Creek	200
Sandy Flat Creek	2,400
Taylor's Creek	100
Valleau's Creek	1,000
West's Creek	2,000
Williams Pond	600

Ontario

Black Creek—north	400
Black Creek—south	400
Electric Light Pond	1,600
White's Mill Pond	500

Oxford

Sutherland's Pond	1,000
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Parry Sound

Barrett's Creek	1,500
Barton's Creek	800
Bay Lake	1,400
Beaver Lake	1,750
Bernard Lake	1,500
Big Clam Lake	1,400
Big Mink Lake	1,000
Black Creek	1,500
Boyne River	750
Bradford's Creek	750
Cheer Lake	750
Clear Lake (Laurier)	2,200
Clear Lake (Perry)	3,400
Clear Lake (Wilson)	750
Cummings Lake	750
Deer Lake	1,400
Deer Lake Creek	1,400
Deer River	750
Eagle Lake	2,250
East Creek	800
Goose Lake	500
Henry Lake	1,200
Hughes Lake	800
Hungry Lake Creek	800
James Creek	1,000
Jordon's Creek	500
Little East River	1,800
Long Lake	1,500
Lynx Lake	1,400
Magnetawan River	11,800
Mink Lake	3,000
Mud Creek	750
Owl Lake	1,500
Poole Lake	750
Ragged Creek	1,000
Rat Lake	2,200
Rock Lake	1,000
Round Lake	2,800
Roussel's Creek	1,000
Sand Lake	2,500
Sequin River	3,000
Sharp's Pond	800
Shells Lake	981
Spring Lake Creek	750
Stirling River	1,500
Three Mile Creek	500
Three Mile Lake	2,000
Welch Lake	1,000
Widgen Lake	750
Wolf Creek	750

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Peel			
Credit River	2,800		
Horan's Stream	1,800		
Peterborough			
Bethany Stream	1,000		
Big Ouse River	9,600		
Cavan Stream	8,600		
Eel's Creek	4,800		
Little Ouse River	4,800		
Ouse Creek, and Upper Mill Pond	500		
Renfrew			
Bass Lake	500		
Battery Lake	1,000		
Biggs Creek	4,900		
Big Tucker Creek	3,000		
Bissett Creek	3,000		
Black Creek	2,500		
Blackfish Bay	3,000		
Black Lake	1,000		
Black Donald Creek	1,500		
Buck Lake	500		
Buriman Creek	3,000		
Cameron Lake	500		
Carson Lake	4,000		
Centers Lake	3,000		
Cochrane Creek	1,500		
Colton Lake	500		
Cotnam Creek	1,000		
Cross Lake	3,000		
Crozier Creek	3,000		
Dam Lake	1,500		
Deep Lake	2,000		
Deux Rivières Creek	3,800		
Devils Creek	1,000		
Dora Bay Creek	2,000		
Eady's Lake	2,500		
Echo Lake	1,500		
Fountain Lake	2,000		
Gardez Pieds Lake	3,400		
Gareau Creek	2,000		
German Lake	1,500		
Godin's Creek	1,000		
Grant Creek	3,500		
Green Lake	1,500		
Green Lake Creek	3,000		
Guardapia Creek	1,500		
Gun Lake	2,500		
Harvey Creek	1,500		
Heart Lake	2,000		
Heenan's Creek	1,500		
Helmert's Lake	3,000		
Hency Creek	3,300		
Hope Lake	2,000		
Indian River	12,500		
Jack's Lake	2,400		
Josie Creek	3,500		
Kawchaw's Creek	1,000		
Kelly Creek	3,600		
Little Tucker Creek	1,000		
Locksley Creek	4,400		
Long Lake	1,000		
Mackey Creek (Head)	5,500		
		Mackie Creek (Clara)	500
		Morphy's Lake	500
		Nadeau Creek	2,200
		Paddy's Lake	3,000
		Petawawa Creek	224
		Red Pine Lake	1,000
		Rock Lake (Algona)	300
		Rocky Lake (Matawatchan)	2,400
		Rocky Lake	1,000
		Round Lake	2,000
		Smith's Creek	4,400
		Smith Lake	1,000
		Spring Creek (Wilberforce)	1,500
		Stewart Creek	3,000
		Thompson Lake	2,400
		Toohey Lake	1,500
		Turner Creek	5,400
		Twin Lakes	2,400
		Wendigo Lake	3,000
		Wylie Creek	11,400
		Simcoe	
		Bear Creek	1,200
		Black Creek	2,787
		Boyne River	1,200
		Catawampus Creek	600
		Mathewson's Creek	2,000
		Sheldon Creek	1,820
		Sturgeon River	1,200
		Tenth Creek	450
		Willow Creek	4,913
		Sudbury	
		Bertrand's Creek	4,000
		Bull Lake	1,000
		Corston Lake	2,000
		Ella Lake	5,000
		Fournier Creek	4,000
		Green Lake	2,000
		McLanders Creek	1,000
		Pumphouse Creek	15,000
		Rapid River	4,000
		Sandcherry Creek	4,000
		Sauble River	1,000
		Trout Lake	1,000
		Veuve River	3,400
		Wavy Creek	4,000
		Thunder Bay	
		Allen Creek	1,500
		Allen Lake	2,000
		Anderson Creek	1,500
		Anderson Lake	2,500
		Arnold Creek	1,500
		Arrow River	2,000
		Bass Creek	4,000
		Bear Trap Lake	2,000
		Beardmore Lake	2,000
		Beaver Creek	2,000
		Big Duck Creek	4,000
		Big Duck Lake	4,000
		Big MacKenzie River	14,000
		Binabeck Lake	1,500
		Bishop Lake	2,000
		Blend River	3,000
		Blind Creek	1,000
		Boulevard Lake	3,000
		Brule Creek	7,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Thunder Bay—Continued

Cedar Creek	13,000
Clegg Lake	1,500
Cliff Lake	4,000
Coldwater Creek	3,000
Coldwater River	6,000
Corbett's Creek	3,000
Cousineau Lake	2,000
Current River	14,000
Deception Lake	2,500
Elgin Lake	3,000
Fall Lake	1,000
Fawn Lake	2,000
Gravel Lake	6,000
Hidden Lake	2,000
High Bluff Lake	1,000
High Lake	1,000
Howcum Lake	1,500
Kaministiquia River	6,000
Knobel Lake	2,500
Lake Ada	500
Lake Eva	2,000
Little Lake	1,000
Little Partridge Lake	1,000
Little Paysplatt River	1,000
Little Whitefish River	2,000
Lofquist Lake	12,000
Longworth Lake	2,000
Loon Creek	1,500
Loon Lake	10,000
Lower Hunter Lake	1,500
Lower Pass Lake	3,000
Lower Pearl Lake	2,000
Lynx Lake	2,000
Mac's Lake	1,000
McGregor Lakes	3,000
McIntyre River	6,000
McVicar's Creek	5,500
Mine Lake	2,000
Mirror Lake	3,000
Moose Creek	3,000
Moose Lake	3,000
Morgan Creek	2,000
Mountain Lake	500
Navilus Lake	2,000
Neebing River	12,000
Nichaun Lake	1,000
Nipigon River	18,000
Oliver Lake	6,000
Parsons Lake	2,000
Partridge Lake	1,000
Pass Lake	6,000
Pearl River	6,000
Pickarel Lake	2,900
Pitch Creek	7,000
Rainbow Lake	2,000
Ring Lake	500
Rock Lake	5,000
Sand Lake	2,500
Sawmill Lakes	2,000
Setting Duck Lake	2,500
Silver Falls Creek	2,000
Silver Islet and Creek	3,000
Silver Lake	1,500
Spectacle Lake	2,000
Spring Lake (Conmee)	1,500

Spring Lake (Dorion)	3,000
Spring Lake (Leduc)	2,500
Squaw Creek	4,000
Surprise Lake	2,000
Trout Lake (Gorham)	6,000
Trout Lake (Stirling)	17,000
Twin Lakes	2,000
Twist Lake	2,000
Upper Hunter's Lake	1,500
Upper Morgan's Creek	2,000
Upper Pass Lake	7,000
Upper Pearl Lake	2,000
Walker Lake	2,000
Warnford Creek	2,000
Warnica Lake	1,500
Whitefish River	1,500
Whitewood Creek	6,000
Wideman Lake	2,500
Wild Goose Creek	1,000

Timiskaming

Beaver Lake	700
Belle Lake	1,000
Charlotte Lake	1,000
Crystal Lake	2,400
Dellmur's Lake	2,200
Driftwood Creek	1,200
Emerald Lake	4,200
Fairy Lake	1,000
Gleason Creek	1,000
Graham Creek	1,000
Halfway Lake	1,200
Hooker Creek	1,200
Jean Baptiste Lake	1,000
Lake of Bays	850
Latour Creek	1,000
Little Otter Lake	1,000
Loon Lake	2,800
Lundy Creek	1,000
Moffatt Creek	1,000
Munro Lake	800
Pike Creek	1,000
Rowley Lake	850
Small Spot Creek	800
South Wabi Creek	1,000
Spring Creek	1,000
Spring Lake	4,200
Trout Lake	5,000
Watabeag River	800
Webb Lake	5,000
Whiskey Jack Creek	700
Whitney Lake	1,000

Victoria

Corbin's Creek	200
Davis Lake	500
Union Creek	900

Waterloo

Cedar Creek	1,500
Elora Creek	750
Erbsville Creek	750
Mannheim Creek	400

Welland

Effingham Stream	800
Sulphur Stream	400

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1938, to March 31st, 1939—Continued

SPECKLED TROUT—Continued

Wellington	
Bell's Creek	3,000
Credit River	1,200
O'Dwyer's Creek	300
Rothsay Creek	1,000
Saugeen River	7,200
Speed River	1,000

York	
Doan's Pond	600
Sales—Demonstration & propagation purposes	16,530

ADULTS

Algoma	
Island Lake (Aweres)	400
Island Lake (McMahon) ...	1,097

Grey	
Bass Lake	100
Mary Lake	100

Thunder Bay	
Coldwater River, Spring, Cedar, Tontan, Cold and Moose Creeks	2,300

Wellington	
Keenan's Pond	100

York	
Sales—Demonstration & propagation purposes	355

HERRING FRY

Frontenac	
Palmerston Lake	500,000
Snake Island, St. Lawrence River	1,250,000
Wolf Lake	500,000

Hastings	
Paudash Lake	1,000,000

Lennox-Addington	
Otter Lake	625,000
Weslemkoon Lake	625,000

Prince Edward	
Bay of Quinte	3,700,000

Great Lakes:	
Lake Erie	5,625,000
Lake Ontario	35,900,000

WHITEFISH FRY

Kenora	
Eagle Lake	1,000,000
Lake of the Woods	17,307,500
Separation Lake	1,000,000
Sydney Lake	1,000,000

Prince Edward	
Bay of Quinte	42,500,000

Rainy River	
Rainy Lake	36,700,000

Thunder Bay	
Lake Nipigon	1,500,000
Savant Lake	1,000,000

York	
Lake Simcoe	2,500,000

Great Lakes:	
Lake Superior	9,493,000
Lake Huron	31,650,000
North Channel	14,250,000
Georgian Bay	73,550,000
Lake Ontario	40,250,000
Lake Erie	50,000,000

APPENDIX No. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES—1934 TO 1938, INCLUSIVE

	1934	1935	1936	1937	1938
Large-mouthed Black Bass					
Fry	35,250	130,000	45,000	135,000	57,500
Fingerlings	4,250	2,153	8,398	4,120	8,061
Yearlings & Adults	197	27*	.....	92	.....
Small-mouthed Black Bass					
Fry	365,500	696,000	780,000	1,275,000	804,000
Fingerlings	35,750	153,065	69,380	141,900	169,800
Yearlings & Adults	420	3,435	5,202	5,893	7,738
Maskinonge—Fry	909,500	460,000	274,000	420,700	2,005,000
Perch—Fry	95,000,000	53,031,400	46,080,000	9,150,000	59,150,000
Pickeral (Yellow)					
Eyed Eggs	5,000,000	2,000,000	2,000,000	2,000,000	2,012,500
Fry	278,470,000	229,629,000	300,759,500	263,743,400	271,567,500
Pickeral (Blue)					
Fry .....	.....	.....	.....	1,000,000	500,000
Brown Trout					
Fingerlings	138,000	109,000	147,050	.....	.....
Yearlings	14,500	9,650	7,290	97,484	.....
Adults	689	6*	.....	.....	59,592
Lake Trout					
Eyed Eggs	402,000	.....	3,209,400	3,225,000	2,437,000
Fry	1,265,000	7,773,034	4,165,000	4,667,000	7,665,000
Fingerlings	14,045,450	14,564,000	18,253,244	15,782,350	10,575,200
Landlocked Salmon (Ouananiche)					
Yearlings .....	.....	13,640	.....	.....	.....
Atlantic Salmon—Fry .....	.....	.....	.....	7,200	.....
Yearlings .....	.....	.....	.....	.....	4,800
Rainbow Trout					
Eyed Eggs	1,000	.....	.....	.....	.....
Fry	4,480	.....	.....	.....	.....
Fingerlings	312,512	134,075	133,000	105,240	321,600
Yearlings	25,014	314	3,507	.....	6,727
Kamloops Trout—Fingerlings .....	.....	85,464	.....	80,000	25,821
Yearlings .....	.....	10,796	.....	.....	.....
Speckled Trout					
Eyed Eggs .....	.....	.....	28,600	.....	1,000
Fry .....	.....	1,645,000	182,000	.....	.....
Fingerlings	6,257,267	5,018,831	1,053,050	384,725	373,314
Yearlings	34,762	35,421	557,270	1,167,073	2,083,538
Adults	1,652	5,420	6,081	16,150	4,452
Whitefish—Fry	376,777,000	296,482,000	428,402,000	383,683,900	323,700,500
Eyed Eggs .....	.....	.....	112,500	4,000,000	.....
Herring—Fry	17,512,000	43,760,000	56,120,000	5,270,000	49,725,000
Eyed Eggs .....	.....	.....	.....	30,000	.....
Golden Shiners	7,000	500	.....	.....	.....
Miscellaneous .....	.....	.....	.....	3,053	.....
TOTALS	796,619,193	655,747,231**	862,401,472	696,395,280	733,265,643

* Exhibition fish

** This total does not include a distribution of 132,646,600 fry and eyed eggs during the five months immediately preceding the said report.

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of
EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	693	4	64	\$ 11,500	149	\$ 67,055	262	\$ 9,633	530,053	\$ 62,804
Lake Superior	339	8	360	51,500	108	44,530	58	3,485	784,929	91,159
North Channel	236	12	212	74,700	62	38,865	58	4,030	622,921	75,249
Georgian Bay	465	17	447	120,810	140	109,561	130	6,262	1,239,047	123,404
Lake Huron	413	18	437	141,074	130	96,564	40	1,685	1,742,567	195,261
Lake St. Clair	127	.....	.....	.....	45	12,736	65	3,385	.....	.....
Lake Erie	893	40	1,080	272,900	173	187,935	126	5,987	1,996,313	239,694
Lake Ontario	656	.....	.....	.....	215	106,770	152	5,252	1,334,910	115,858
Southern Inland Waters	348	.....	.....	.....	14	2,910	117	3,973	900	45
Totals	4,170	99	2,540	\$672,484	1036	\$666,926	1,008	43,692	8,251,640	903,474

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickarel (Blue)	Pickarel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	2,384	1,433,479	271,052	710,402	82,594	1,302,169
Lake Superior	1,855,500	311,718	1,667,822	8,174	14,205	75,534
North Channel	1,723	185,682	626,072	85,460	.....	53,467
Georgian Bay	47,293	1,196,159	1,426,874	43,077	.....	124,625
Lake Huron	186,714	205,230	1,747,281	94	2,027	180,419
Lake St. Clair .....	.....	150	.....	21,537	1,100	47,705
Lake Erie	1,374,499	1,001,788	29	20,231	7,157,666	509,495
Lake Ontario	1,230,559	602,337	275,811	104,636	59,522	14,976
Southern Inland Waters	4,245	11,136	25,530	10,176	10	4,440
Totals	4,702,917	4,947,679	6,040,471	1,003,787	7,317,124	2,312,830
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$235,145.85	\$544,244.69	\$664,451.81	\$60,277.22	\$365,856.20	\$254,411.30

No. 3

DEPARTMENT, ONTARIO

Province of Ontario, for the Year Ending December 31st, 1938.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No. Hooks	Value	No.	Value	No.	Value	No.	Value	
.....	.....	.....	45	\$ 14,710	63	\$2,135	.....	.....	2,400	\$490	.....	.....	143	\$32,600	113	\$12,173	\$213,100
.....	.....	.....	57	27,650	.....	.....	.....	.....	.....	.....	.....	.....	42	16,725	37	9,825	244,874
.....	.....	.....	94	39,350	.....	.....	.....	.....	.....	.....	.....	.....	47	14,245	37	14,180	260,619
5	900	\$ 770	82	72,545	48	720	.....	.....	27,004	3,595	4	\$ 17	57	14,850	60	30,606	483,140
.....	.....	.....	114	74,350	.....	.....	.....	.....	13,536	2,689	.....	.....	55	23,505	31	7,160	542,288
32	7,100	4,017	102	10,425	3	450	1	\$ 1	3,600	241	.....	.....	15	6,775	10	1,850	39,880
44	12,200	8,605	618	295,550	10	1,500	1	3	2,100	49	.....	.....	104	131,660	76	25,075	1,168,958
5	410	485	.....	.....	588	12,800	23	110	2,550	388	.....	.....	38	9,510	29	6,320	257,493
45	4,162	2,935	.....	.....	167	4,514	39	178	3,350	98	115	967	38	2,814	6	496	18,930
131	24,772	\$16,812	\$1,112	\$534,580	879	\$22,119	64	\$292	54,540	\$7,550	119	\$984	539	\$252,684	399	\$107,685	\$3,229,282

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
111,681	.....	19,996	245,877	8,367	1,560	406,419	2,424	4,598,404	\$453,398.77
2,586	.....	672	61,927	.....	603	58,527	.....	4,057,268	326,603.41
6,553	.....	6,497	939	36	764	227,100	37	1,194,330	110,281.53
2,110	.....	4,512	77,670	7,729	44,585	107,050	87	3,081,771	319,067.52
3,761	.....	140,818	373,365	2,940	3,707	161,816	295	3,008,467	280,582.22
9,127	.....	29,455	.....	63,112	261,041	235,542	117	668,886	37,019.09
16,480	.....	2,595,484	.....	78,294	373,930	1,373,076	860	14,501,832	797,444.93
5,284	42,286	169,427	.....	191,242	144,174	245,769	21	3,086,044	212,472.95
.....	10,320	10,985	.....	122,338	241,706	276,053	.....	716,939	36,770.55
157,582	52,606	2,977,846	759,778	474,058	1,072,070	3,091,352	3,841	34,913,941	.....
.40	.07	.05	.06	.08	.05	.03	1.00	.....	.....
\$63,032.80	\$3,682.42	\$148,892.30	\$45,586.68	\$37,924.64	\$53,603.50	\$92,740.56	\$3,841.00	.....	\$2,573,640.97

APPENDIX No. 5
COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1937 Pounds	1938 Pounds	Increase Pounds	Decrease Pounds
Herring	4,153,582	4,702,917	549,335	.....
Whitefish	5,518,388	4,947,679	.....	570,709
Trout	6,098,993	6,040,471	.....	58,522
Pike	1,040,940	1,003,787	.....	37,153
Pickrel (Blue)	9,449,521	7,317,124	.....	2,132,397
Pickrel (Dore)	2,136,177	2,312,830	176,653	.....
Sturgeon	93,041	157,582	64,541	.....
Eels	74,906	52,606	.....	22,300
Perch	2,050,126	2,977,846	927,720	.....
Tullibee	947,120	759,778	.....	187,342
Catfish	535,692	474,058	.....	61,634
Carp	1,086,407	1,072,070	.....	14,337
Mixed and Coarse	2,905,451	3,091,352	185,901	.....
Caviare	2,528	3,841	1,313	.....
TOTALS	36,092,872	34,913,941	.....	*1,178,931

* Net Decrease

APPENDIX No. 6
STATEMENT OF YIELD OF THE FISHERIES OF ONTARIO
1938.

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring	4,702,917	\$.05	\$235,145.85
Whitefish	4,947,679	.11	544,244.69
Trout	6,040,471	.11	664,451.81
Pike	1,003,787	.06	60,227.22
Pickrel (Blue)	7,317,124	.05	365,856.20
Pickrel (Dore)	2,312,830	.11	254,411.30
Sturgeon	157,582	.40	63,032.80
Eels	52,606	.07	3,682.42
Perch	2,977,846	.05	148,892.30
Tullibee	759,778	.06	45,586.68
Catfish	474,058	.08	37,924.64
Carp	1,072,070	.05	53,603.50
Mixed and Coarse	3,091,352	.03	92,740.56
Caviare	3,841	1.00	3,841.00
TOTALS	34,913,941		\$2,573,640.97

APPENDIX No. 7
ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS
OF THE PROVINCE
1919—1938 INCLUSIVE

1919	\$2,721,440.24	1929	\$3,054,282.02
1920	2,691,093.74	1930	2,539,904.91
1921	2,656,775.82	1931	2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49
1927	3,229,143.57	1937	2,644,163.49
1928	3,033,944.42	1938	2,573,640.97

Thirty-Third Annual Report

OF THE

**Game and Fisheries
Department**

1939 - 1940

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1941



ONTARIO

TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 4 1

TO THE HONORABLE ALBERT MATTHEWS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Third Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1940.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
*Minister in Charge,
Department of Game and Fisheries.*

Toronto, 1941.

THIRTY-THIRD ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:—

I have the honour to submit to you in this and the following pages the Thirty-third Annual Report of the Department of Game and Fisheries, outlining the activities of various Departmental services and including statistical and comparative tables for the fiscal year ended March 31st, 1940.

INTRODUCTORY

More than ever before the conservation of our natural resources is of paramount importance, and wilful waste becomes a serious menace.

During the period under review the grim spectre of war, whose ugly form had on previous occasions cast a dark shadow over us, became a reality, and the peaceful pursuits of our normal lives have once more been directed, in large measure, to the prosecution of the war. Uppermost in our minds, perhaps, is the picture of a war-torn world in which sorrow, suffering and anxiety predominate; yet even this dreary picture is brightened somewhat by the heroism and self-sacrifice of those who are so bravely striving to maintain and strengthen their right to live in accordance with their national traditions.

The sportsman knows the economic value of our wildlife heritage, and is familiar with the part that wealth plays in the prosecution of a war. Therefore he has a definite and personal responsibility to see that these resources shall not be dissipated through unlawful means.

Possibly, there never was a time in the history of wildlife administration when the sportsmen of this Province were more deeply conscious of the necessity for exercising restraint, observing regulations and playing the game according to the best traditions, than just now. Education and organized effort have done much to bring about this happy state of affairs. No longer is it considered smart to disregard the provisions of the regulations which govern, for waste attributable to the display of such disregard destroys much more quickly than subsequent remedial measures can restore. Conservation as it affects the individual is more than law observance, although the latter is of primary importance, and is therefore mandatory. The ethics which apply are not written on the statute books, but are a voluntary contribution representing personal restraint and an attitude of mind which reflects true sportsmanship. Conservation and sportsmanship are closely allied.

It is a splendid sign to find sportsmen themselves through representative organizations pointing out to fellow sportsmen certain laws and fundamental principles with regard to their sport. Law observance is so essential to good govern-

ment and wise administration that the thoughtful man needs no special reminder of his duty in that regard. To the sportsman the laws which govern his sport are so necessary to its perpetuation that their observance is the best contribution the individual can make to the protection of the resources which make such sport possible.

We are anxious to make it clear to our American friends that the laws of the country have not changed so far as tourists are concerned, that the welcome sign is still displayed at our ports of entry and applies to all but enemy aliens, that instead of taxing American money there is a premium on same, which means quite a saving during a prolonged stay and that despite war conditions our food supplies are sufficient for all requirements. Insofar as hunting and fishing are concerned there has been no recession in our plans for maintaining and developing our resources.

Ontario's facilities for hunting and fishing are unsurpassed, and the regulations which apply provide a minimum of restriction and a maximum of sporting possibilities. These facts are well known to the thousands of visitors who annually sojourn among us and require no elaboration. However, it seems necessary to emphasize the fact that our hospitality is still unimpaired and our forests and waterways have lost none of their attractiveness. In short, visitors are assured of the same courteous reception and treatment as heretofore, and the war angle will but add to the thrill of the visit.

The tourist traffic has become one of the largest industries of the Province and its ramifications are such that, directly or indirectly, both urban and rural districts share in the revenue derived therefrom. This particular business has its stock-in-trade in those physical attractions and natural resources which are a part of our heritage, and from which we secure a great deal of material wealth.

Insofar as the Department of Game and Fisheries is concerned the year was one of progressive development. Fish culture operations were further expanded through the addition of more hatcheries and rearing pond facilities, and more pheasants were released than during the previous year. The fish and game resources of the Province are in better shape than they have been for a considerable period, and this is confirmed by the fact that departmental revenues reached the highest peak in our history.

FINANCIAL

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$ 683,938.72	\$451,041.91	\$232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27

The statistical table above set forth shows the total revenue and expenditure of the Department for the year reported on and for the four preceding fiscal years. It will be observed that there has been in each year a succeeding increase in revenue, climaxed in 1939-40 with a revenue exceeding the one million dollar mark, the first in the history of the Department. Details of the various sources from which this revenue was derived are indicated in the statement which follows:—

REVENUE FOR FISCAL YEAR ENDING MARCH 31ST, 1940

ORDINARY—

MAIN OFFICE—

GAME—

Licenses—

Trapping	\$ 39,772.30
Non-resident Hunting	84,590.00
Deer	81,882.00
Moose	2,733.50
Gun	94,882.18
Dog	5,550.00
Fur Dealers	25,446.00
Fur Farmers	9,583.50
Tanners	100.00
Cold Storage	168.00

\$ 344,707.48

Royalty 116,520.40

\$ 461,227.88

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 86,858.00
Angling	391,504.00

\$ 478,362.00

Sales — Spawn taking 168.93

Royalty 12,140.09

490,671.02

GENERAL—

Licenses—

Tourist Camps	\$ 7,445.00
Guides	8,276.00

\$ 15,721.00

Fines 16,521.74

Costs Collected (Enforcement of Game Act) ... 726.11

Sales — Confiscated articles, etc. 23,901.02

Rent 3,738.65

Commission retained by Province on sale of lic. 2,328.90

Miscellaneous 243.42

63,180.84

EXPERIMENTAL FUR FARM—

Sales — Pelts 271.08

Net Ordinary Revenue \$1,015,350.82

Upon reference to the five-year revenue statement it will be observed that as compared with that of the previous year the revenue in 1939-40 shows an increase in excess of one hundred thousand dollars. The principal sources which contributed to this large increase were the revenues derived from fur royalties, the sale of trapping licenses and the sale of non-resident angling licenses. Increased revenue from fur royalties amounting to \$42,455.65, and trapping licenses amounting to a sum somewhat in excess of \$13,500.00, or more than fifty per cent in excess of the sum derived from this source in the previous year, was to a great extent due to the fact that after an entire close season of several years two limited periods of open season were provided for the taking of beaver, during which open season there was a catch of 33,530 of these animals upon which a royalty of \$1.00 per pelt was collected by the Department in accordance with existing provisions of the Game and Fisheries Act, and greatly increased catches during the regular open seasons which prevailed in the case of mink and muskrat were also factors in the increased revenue from this

source. The sale of non-resident angling licenses resulted in the collection of the total sum of \$391,504.00, an increase of more than \$52,000.00 as compared with the figure from the same source in 1938-39.

Total expenditures for the year, including both ordinary and capital, amounted in all to a sum of \$568,198.55, showing an operating surplus of \$447,152.27 for the period under review. Capital expenditures totalled \$10,095.43, of which amount \$3,933.47 was spent on improvements at the Departmental bird farms located at Normandale and Codrington, while the balance of \$6,161.96 was expended on various fish hatchery properties. The principal items of ordinary expenditure were \$219,211.11 on the maintenance of the staff of regular and seasonal officers engaged in the work of providing enforcement of provisions of the Game and Fisheries Act and additional patrols during the fish spawning periods; and the sum of \$211,142.44 for the operation of the various fish hatcheries and rearing stations maintained by the Department in connection with the propagation and distribution of fish by the Fish Culture Branch, the details of this service being enumerated further along in this report. Expenditures additional to the two principal items to which reference has just been made include \$27,399.50 spent in connection with the purchase and distribution of game birds and animals for re-stocking purposes, \$21,506.20 of this total being for the purchase of some 26,500 live pheasants, which were liberated principally in the various Townships in southwestern Ontario counties established as Regular Game Preserve Areas; expenses under the Wolf Bounty Act were \$25,058.12, actual bounty payments being in all \$24,905.00; while special grants paid by the Department in accordance with appropriations provided by the Legislature amounted to \$7,400.00, details of which are as follows: \$2,000.00 expended under the supervision of Professor W. J. K. Harkness in connection with biological surveys and research work in fisheries, particularly on waters in Algonquin Provincial Park; \$2,500.00 to the Ontario Fur Farmers' Association to assist the services of this organization in the development of the fur farming industry throughout the Province; \$1,000.00 to the Ontario Federation of Anglers to be expended in connection with their educational campaign to secure more improved co-operation along the lines of closer observance of provisions of the Fisheries Regulations; while the balance of \$1,900.00 was allotted to Mr. Jack Miner, Mr. Thomas N. Jones, and Miss Edith L. Marsh to encourage these interested naturalists in their work of bird protection on the sanctuaries maintained by them in the Counties of Essex, Elgin and Grey respectively.

GAME

The following table shows comparative details of the various hunting licenses, both resident and non-resident, which were issued during the seasons which prevailed, together with similar information for preceding years, and from which it will be observed that there was but little change in the numbers of such licenses which were disposed of during the year reported upon as compared with the numbers sold in the previous year:

	1936-37	1937-38	1938-39	1939-40
Resident Deer	15,394	18,672	21,762	21,416
Resident Deer (Camp)	262	283	307	323
Resident Deer (Farmers)	5,386	6,503	7,719	7,722
Resident Moose	542	580	471	497
Resident Gun	79,531	90,756	114,580	113,992
Non-Resident Deer	848	1,036	1,329	1,492
Non-Resident "General"	878	1,043	569	593
Non-Resident Small Game	1,129	1,634	1,618	1,567
Non-Resident Bear (Spring season) .		30	49	108

At this point I desire to draw attention to the effort now being made by the Department to develop the interest of non-resident hunters in the possibilities of a successful bear hunt in this Province during the period between April 1st and June 15th, and, while the numbers of such licenses which have been sold for this privilege during the three years this has been in effect are not substantial, there are indications that knowledge of the policy is becoming somewhat more widespread, and there is every reason to believe that the increasing numbers of inquiries being received from interested hunters will eventually mean that considerably larger numbers will avail themselves of the opportunity for a splendid spring outing which is thus provided.

The following is a summary of conditions which apply to the various species of game animals and birds of the Province, compiled from reports received in the Department from the officers of the Enforcement Service:—

DEER:—The white-tailed or Virginia deer common to this part of the Continent continues to be quite plentiful in many sections of the Province, and the hunting of this species during the regular open season which prevails provides an opportunity for the sportsman to partake in a most enjoyable form of recreation. Reports indicate that so far as the northern and northwestern portions of the Province are concerned, generally speaking, conditions are quite favourable. There are, however, certain scattered sections in which the habitat is not conducive to the existence of deer and in which areas the herd is not at all plentiful. By reason of its easy accessibility extensive hunting is carried on in the northern districts of the southern part of the Province, nevertheless, deer in these areas continue to be plentiful, and in fact are showing quite an increase in their numbers in some areas.

In the counties included in the southwestern peninsula and in certain eastern counties there has been an entire close season on deer for the past several years. This complete protection has resulted in deer in these areas becoming quite numerous, and it is no unusual occurrence to see these animals as one travels along our highways. In Bruce and Grey Counties the increase has been so favourable as to warrant the provision of a limited open season there.

Hunters returning from the north have reported a satisfactory deer season. The general opinion was the deer were quite plentiful, increasing numbers of does and fawns being observed. This is the natural result of the present regulations which provide a large measure of protection to does and their young, while in addition to this protective measure the past few winters have been reasonably mild, and this has been an important factor in maintaining and developing the herd.

With a reasonable measure of protection and the co-operation of the general public to that end, the deer herd is quite capable of replenishing itself and taking care of all reasonable demands.

MOOSE:— The moose is the largest of the deer tribe found on the American continent. It is of majestic appearance, and a large spread of antlers adds to its value as a sporting trophy. It is to be found in the northern portions of the Province, though a few specimens are frequently seen in the districts of Muskoka, Parry Sound, Renfrew as well as in the sections immediately adjacent to Algonquin Park. Nowhere in Ontario, however, can they be described as plentiful, and restrictions for their protection which are in effect are necessary to ensure the perpetuation and rehabilitation of this species. In certain sections, such as the Districts of Cochrane, the northern portions of the Districts of Sudbury and Algoma, and the Districts of Thunder Bay, Rainy River and Kenora, they are reported to be fairly plentiful, but their future development will depend on many factors, particularly environment, for even the great northland is opening up before the ever progressive advance of civilization.

CARIBOU:— The caribou is a near relative of the reindeer of northern Europe and is the most useful though not the most comely of its race. It has few of the prepossessing physical endowments of the elk and none of the grace of the deer. Caribou are extremely scarce in the Province and are reported only from the Districts of Kenora, and Thunder Bay, as well as from the northern portions of the Districts of Algoma, Sudbury and Cochrane. Perhaps because of the fact that they have been completely protected for a number of years some slight increase has been noted in the eastern portion of the Thunder Bay District, more particularly in the territory which comprises the Superior Game Preserve, and in the Chapleau Crown Game Preserve located in the Districts of Algoma and Sudbury.

ELK:— The wapiti or North American elk is one of the largest specimens of the deer tribe. He is also without doubt the most beautiful and stately animal in all the deer family. Although of extremely large proportions his physical appearance is such as to immediately attract attention. The magnificent antlers often measure six feet in length and these added to a graceful and compact body give it a stately appearance.

The elk which are found in Ontario at present are those which were imported to the Province from Western Canada, and their progeny. The original shipments on arrival here were placed on the following Crown Game Preserves, viz: Pembroke, located in the county of Renfrew; Burwash, located in the District of Sudbury; Chapleau, located in the Districts of Sudbury and Algoma; Goulais River-Ranger Lake, located in the District of Algoma; and Nipigon-Onaman, located in the District of Thunder Bay.

There has been some improvement in practically all instances save one,— those liberated in the Nipigon-Onaman Crown Game Preserve. Specimens from the herd at Pembroke have previously been placed in Algonquin Provincial Park and on the Bruce Peninsula, and during the year under review others were liberated in the Nipissing and Peterborough Crown Game Preserves, while some animals from the herd at Burwash were liberated in territory adjacent thereto. It is reported that their numbers have increased in the Chapleau and Burwash Crown Game Preserves and also on the Bruce Peninsula, while some of these animals have been observed on Beausoleil Island in Georgian Bay.

BEAR:— Black bear are common throughout the northern portion of the Province, and are found to a lesser extent in many other sections specially among which are the Districts of Parry Sound, Muskoka, Haliburton, Renfrew, the northern part of Hastings County and in the Bruce Peninsula. These animals are both hunted and trapped though not extensively, but there is an indication that increasing numbers of non-resident hunters are becoming interested in the spring hunt for which provision has been made. Unquestionably the sportsman gets a great thrill out of bear hunting.

RABBITS:— Rabbits continue to provide many opportunities for wholesome recreation and sport, and more particularly is this so in the southern portion of the Province. In these southern counties cotton-tail rabbits are available in satisfactory numbers although bag limits have been introduced and the sale or purchase prohibited in some of these counties. The jack-rabbit (European Hare) is pretty well confined to the western counties, though this species is gradually extending its range to the east and north. The varying hare or snowshoe rabbit is to be found in most districts although it alone is the prevailing species in Northern Ontario, and while it is reported to be quite scarce in that area there are indications of some improvements from many sections there.

Rabbit hunting is a favourite activity of Ontario sportsmen during the fall and winter months. The "jack" is probably the most popular of the species because of its size, its great speed and the fact that it is to be found in open country which

makes the hunting easier. Its speed is its chief defence and it is not easily subdued.

Hunters should note that while rabbits are quite prolific breeders there is just as much danger of exterminating them through needless waste as any other species of game. This is particularly true in the more populous areas, where hunting is heavy and habitat restricted. Control is necessary to prevent damage to property, but game which provides such healthy outdoor sport at a minimum of expense is worth conserving.

PARTRIDGE:— The ruffed grouse, or partridge as it is more generally called, is a native bird and is found in varying numbers throughout the Province. In the more settled sections its numbers are very limited, and it is further subject to a cycle of scarcity and abundance which materially affects its permanent development. However, at the present time, the cycle appears to be on the up swing again and improvement has been noted, particularly throughout Northern Ontario, as well as in the northern section of the southern part of the Province.

The sharp-tailed grouse or prairie chicken is prevalent only in the north-western districts and even there this species is comparatively scarce.

The ruffed grouse is perhaps the fastest and most elusive of our upland game birds.

QUAIL:— These birds are found principally in the southwestern counties of Essex, Kent, Lambton and Middlesex and in the counties immediately adjacent to the eastern boundaries thereof, in which section they are fairly plentiful. Scattered beavies are also reported in some eastern counties, that is Stormont, Dundas and Glengarry.

PHEASANT:— The English ring-necked pheasant is a non-native bird. It was originally introduced to Ontario about half a century ago and since then has undergone a process of natural and artificial development which has served to firmly establish it in certain areas,—particularly in the southwestern part of the Province where the climate is not too rigorous. Because of the fact that climatic conditions are extreme over much of the Province it is unlikely that the pheasant will have an extended range. However, it has done so well where it has become established that open seasons have been the rule for a number of years.

In recent years the Department has enlarged and intensified its operations in connection with the propagation and distribution of pheasants and during the year reported on adult pheasants and poults numbering 30,396 were liberated in areas suitable for their development. Of this number 27,373 were distributed in Townships established as Regulated Game Preserve Areas, and the balance, 3,023 birds, in Counties not included in this Regulated scheme, principally Essex and Kent. The birds were allotted as they were available according to the area of the Townships concerned and the conditions prevailing therein. Details of the distribution are as follows:—

Regulated Game Preserve Areas: County of Brant, two Townships, 801 birds; County of Elgin, four Townships, 1813 birds; County of Haldimand, ten Townships, 3,824 birds; County of Halton, four Townships, 1909 birds; County of Lennox and Addington, one Township, 140 birds; County of Lincoln, eight Townships, 3,043 birds; County of Middlesex, two Townships, 1270 birds; County of Norfolk, four Townships, 1,940 birds; County of Ontario, three Townships, 1,185 birds; County of Oxford, one Township, 546 birds; County of Peel, four Townships, 1,797 birds; County of Prince Edward, one Township, 340 birds; County of Welland, eight Townships, 3,173 birds; County of Wellington, one Township, 370 birds; County of Wentworth, six Townships, 1,871 birds; and the County of York, six Townships, 3,351 birds.

General:— County of Essex, 1,970 birds, of which 1,582 were liberated on the mainland and 388 on Pelee Island; County of Kent, 929 birds; and the remaining 124 birds were distributed in four other areas.

HUNGARIAN PARTRIDGE:— These birds were also introduced to the Province from Europe, but have not yet become plentiful anywhere. So far as the north is concerned their numbers are negligible though evidence of their existence is reported from certain sections of Temiskaming, Algoma and Thunder Bay. They are most numerous in the very extreme southwestern counties, while reports indicate that they are becoming more plentiful in some of the eastern counties.

DUCKS:— Generally speaking, this species of migratory water-fowl provides quite a large proportion of the sport which is available to the hunter during any season, and the season is a reasonably long one. Practically every section of the Province has its quota of ducks during the period of migration. Restrictions affecting the taking of ducks have recently been provided with a view of affording greater protection. The results have been very beneficial and reports indicate that their numbers have increased. Regulations for the taking of ducks are provided by the Federal Government under the terms of the Migratory Birds Convention Act, a Treaty applicable in the United States and Mexico as well as in Canada.

Few have more than a passing acquaintance with the various species of North American ducks with the exception of one or two of the most common. Not all of these species are to be found in Ontario, but there is a wide variety, including the Mallard, Black duck, Gadwall or Grey duck, Pintail, Widgeon-Baldpate, Shoveller, Blue-winged Teal, Green-winged Teal, Wood duck, Bluebill, Lesser Scaup, Canvas-back, Red-head, Golden-eye-Whistler, Bufflehead, Long-tailed duck, Old Squaw, Black Scoter, Velvet Scoter, Ruddy duck and Eider duck, some of which are quite common and others not at all plentiful. Of the various species herein enumerated only the Wood duck is provided the protection of an entire close season.

GEESE:— There are not many areas in Ontario in which these birds may be successfully hunted, and while they are observed in flight during the fall and spring migrations, in numerous sections the conditions which prevail during these migrations are such that during the open season which is provided, any hunting which is available is pretty well restricted to the James Bay shore in the far north, and to a few of the extreme southwestern counties. There are several different species of geese, of which the Canada Goose is perhaps the best known.

WOODCOCK:— This species is extremely scarce in Northern Ontario, and is none too plentiful in the southern portion of the Province. Reports from Departmental officers show the most favourable locations to be certain of the counties along the north side of Lake Erie.

SNIPE:— As in the case of woodcock, this species is quite scarce in Northern Ontario. They are reported to be somewhat plentiful in several southern counties, while increasing numbers are recorded in scattered areas a little farther north.

PLOVER:— These birds continue to be quite scarce throughout the entire Province though some slight improvement is reported from different areas in the most southerly counties.

During the year under review special Regulations were provided, details of which are as follows:—

- (a) An open season for deer in that portion of the County of Carleton lying west of the Rideau River, from November 6th to November 20th, both days inclusive. General deer hunting regulations were effective.

- (b) An open season for deer in the Townships of Amabel, Albemarle, Eastnor, Lindsay and St. Edmund, in the County of Bruce, extending from November 13th to November 18th, both days inclusive. General deer hunting regulations were in effect during this period, except that the use of dogs was not permitted.
- (c) An open season for cock pheasants on Pelee Island, October 27th and 28th. Limit of five birds per day. Special municipal hunting license \$5.00.
- (d) An open season for cock pheasants in the various Township Regulated Game Preserve Areas, and in the various Townships in the County of Oxford, October 20th, 21st and 28th. Limit of three birds per day. Special municipal hunting license \$1.00 per day.
- (e) An open season for cock pheasants, quail and Hungarian partridge in the Counties of Essex (excluding Pelee Island) and Kent, October 20th, 21st and 28th. Limit of three cock pheasants, four quail and two Hungarian partridge per day.
- (f) An open season for partridge throughout the Province (excepting the Counties of Essex and Kent and the various Township Regulated Game Preserve Areas),—October 9th to October 14th, both days inclusive, and November 6th to November 11th, both days inclusive. Limit of five birds per day, and not more than fifteen during the two periods specified.
- (g) Prohibiting the hunting or shooting of any game on Pelee Island during the period October 21st to October 26th, both days inclusive.
- (h) Prohibiting the hunting of deer during the year 1939 in the Counties of Durham, Northumberland and Prince Edward, and in concessions IX and X of the Township of Cambridge in the County of Russell.

FUR-BEARING ANIMALS

Conditions as they apply to fur-bearing animals throughout the Province are summarized in the following references from reports submitted to the Department by members of the Field Service Staff:—

BEAVER:— Conditions as they affected this species of splendid fur bearer following the period of complete protection which had prevailed for the past few years were sufficiently satisfactory to warrant the provision of two short periods of open season. The regulations which governed the taking of beaver during these periods provided:—

- (a) An open season from March 25th to April 15th, 1939, effective in that part of Ontario north and west of the French and Mattawa Rivers and Lake Nipissing, (including the District of Manitoulin) and in the Districts of Parry Sound, Muskoka, and Nipissing (south of the Mattawa River) and the Counties of Victoria, Haliburton, Hastings, Renfrew, Lennox and Addington, Frontenac and Lanark. Trappers were authorized to take not more than ten beaver, and pelts so taken were to be disposed of by them not later than ten days after the termination of the open season.

- (b) An open season from December 1st to December 21st, 1939, effective in that part of Ontario north and west of the French and Mattawa Rivers and Lake Nipissing (including the District of Manitoulin), and in the Districts of Parry Sound, Muskoka and Nipissing (south of the Mattawa River) and the Counties of Grey, Victoria, Haliburton, Hastings, Renfrew, Lennox and Addington, Frontenac and Lanark. Similar provision as in (a) as to limits of catch and disposition prevailed.

A total of 33,530 beaver were reported to have been taken during these periods, and, while this would naturally decrease the stock, sufficient numbers remained for purposes of replenishment.

FISHER:— This animal is practically extinct in Southern Ontario, and is extremely scarce in Northern Ontario. Very few taken in any single trapping season.

FOX:— Reported to be quite plentiful and showing signs of increasing in all parts of Southern Ontario except in the lower counties in the southwestern peninsula where they are reported to be scarce. They are not at all plentiful in the northern portion of the Province, though there are scattered showings of improvement.

LYNX:— Prevalent only in the northern section of the Province, and even there its numbers are extremely rare. Reports received indicate no favourable change anywhere.

MARTEN:— Conditions similar to those for fisher and lynx. It is extremely scarce in every section of the Province and there is no improvement reported.

MINK:— While there was a considerable increase in the number of pelts taken during the season, this condition cannot be construed as representing an important increase in the numbers of mink which exist throughout the Province. They are not too plentiful anywhere and while reports of increasing numbers have been received from some areas, there has been no general improvement and conditions were about normal.

MUSKRAT:— Muskrat continues to provide a very substantial portion of the revenue derived by trappers. The catch as compared with that of the previous year showed an increase of more than 35 %, possibly attributable to somewhat improved conditions affecting the species and the fact that favourable weather conditions prevailed during the trapping season, which was provided by special regulation and at different periods in different areas. Notwithstanding the decided increase in the take of muskrats this species requires continued protection to assist in its development.

OTTER:— Found only in Northern Ontario and the more northerly areas of Southern Ontario. It is not too plentiful in any section and the annual catch is limited.

RACCOON:— Inhabits only Southern Ontario, where numbers remained about the same with probable slight improvement in some areas. The catch during the open season which prevailed was about normal.

SKUNK:— While this animal continues plentiful, prevailing market prices do not encourage trappers to make any special effort for the taking of the same.

WEASEL:— This species is still very plentiful throughout the entire Province, though it would appear not to be increasing to any great extent. However, as in the case of skunk, prevailing market prices are not sufficient return to encourage trappers in the taking of weasel.

Generally speaking trappers had a fairly profitable season, particularly in areas where the special open season for beaver prevailed and having in mind the increased muskrat catch.

The following comparative table shows the numbers of pelts of various species of fur-bearing animals which were exported from and dressed within the Province during the year under review in addition to the three years immediately preceding.

	1936-37	1937-38	1938-39	1939-40
Bear	476	496	363	295
Beaver	238	235	1,366	33,530
Fisher	2,117	1,463	1,467	1,382
Fox (cross)	4,156	2,426	2,164	981
Fox (red)	35,232	24,912	22,366	19,925
Fox (silver or black)	360	201	131	101
Fox (white)	17	47	142	36
Lynx	2,081	1,284	785	514
Marten	1,464	1,709	2,074	1,790
Mink	33,930	22,766	25,111	36,518
Muskrat	370,239	343,972	508,893	689,706
Otter	3,779	3,737	3,764	4,101
Raccoon	14,243	13,194	9,493	14,493
Skunk	87,950	61,576	89,100	74,176
Weasel	78,643	79,853	93,488	95,832
Wolverine	2	5	3	2

According to information compiled in the Department from reports received from various fur dealers it has been estimated that fur taken by trappers during the season of 1939-40 was worth the total sum of \$2,343,648.95, which is more than twice as much as the proceeds of trapping operations produced in the previous season. A large percentage of this increase was of course attributable to the proceeds received from the sale of 33,530 beaver pelts involved which pelts have been estimated to be worth \$581,745.50, and it may be interesting to note that practically all these beaver pelts were exported from the Province.

In addition to the \$2,343,648.95 derived from the sale of pelts taken by trappers, it has been estimated that the sum of \$1,050,463.55 was received by fur farmers from the sale of their product, so that in all the entire fur production of the Province was worth \$3,394,112.50

FUR FARMING

During the year this industry continued to flourish, 1920 fur farms being licensed, an increase of seven per cent over the premises licensed in the previous year. Declaration of war just prior to the pelting season created some uncertainty and while only a few ceased operating entirely there was a general tendency to reduce breeding stock, especially silver fox.

Fur farming comprises, almost entirely, the propagation of foxes and mink. This year the mink gained an ascendancy over the silver fox. There were 1,000 fur farmers raising silver foxes in 1938 and 906 raising mink, whereas in 1939 there were 1,116 raising mink and only 918 raising silver fox, and while breeding stocks of silver foxes were reduced by twenty per cent mink increased in excess of five

per cent, and it is interesting to speculate the increase there might have been had normalcy prevailed.

The subjoined comparative table shows the total breeding stock retained on these licensed premises as at the first days of January in each of the four years enumerated:-

	1937	1938	1939	1940
Beaver	21	25	2	4
Fisher	20	16	19	27
Fox (cross)	257	235	197	168
Fox (red)	207	140	120	96
Fox (silver or black)	23,869	24,848	22,923	18,327
Fox (blue)	0	0	98	209
Lynx	2	2	2	2
Mink	15,539	21,982	30,378	31,989
Muskrat	351	302	267	235
Raccoon	358	351	284	243
Skunk	5	9	6	10
Bear	15	15	15	15
Marten	4	11	15	19
Otter	0	0	0	2

The fur records of the Department show that licensed fur farmers during the year disposed of the following pelts taken from stock raised by them, viz:—

205 cross fox, 128 of which were exported and 77 tanned.

38,889 silver and black fox, 23,399 of which were exported and 15,490 tanned.

73 blue fox, 61 of which were exported and 12 tanned.

60,355 mink, 57,630 of which were exported and 2,725 tanned.

CROWN GAME PRESERVES

During the year four Crown Game Preserves were established in southwestern Ontario in accordance with the schedule appended hereto. In addition the area of the Peasemarsch Crown Game Preserve, located in the County of Grey, was enlarged. The number of these Crown Game Preserves in the Province now totals 121 covering an area of approximately 6,101,029 acres.

Designation	County	Extent in Acres
Roselands Crown Game Preserve	Halton	1,200
Oakland Crown Game Preserve	Brant	1,200
xPeasemarsch Crown Game Preserve ..	Grey	1,050
Waterloo Crown Game Preserve	Waterloo	1,000
J. W. Crow Sanctuary	Norfolk	800

x Enlarged.

REGULATED GAME PRESERVE AREAS

The setting aside of certain townships as Regulated Areas had a two-fold purpose, viz:—to ensure a larger measure of co-operation between the farmer and the sportsman through establishing an additional amount of control and avoiding excessive hunting in any one area; and the development of upland game birds, principally pheasants, through intensive propagation and the added degree of protection which pertains in these areas. Co-operation is stimulated by the fact that hunting in these regulated townships is restricted, and control is exercised by the simple expedient of requiring the hunter to provide himself with a special township license. These are limited in numbers so far as non-residents of the township are concerned, so that the general influx of outsiders to any one district is checked.

It should be noted that these Regulated Townships have been set aside at the request of the municipal authorities concerned, and that they have endorsed the regulations provided as tending to eliminate the friction which previously existed. The Township Councils, in view of the restrictions in force, are discouraging the posting of private lands as the success of the scheme depends upon the generous provision of hunting facilities during prescribed open seasons.

As some confusion still exists in the mind of the sportsman as to the regulations which apply, let us briefly summarize these. In the first place, these regulated areas are closed to hunting except as prescribed by the Department. Provision has therefore been made to provide an open season for pheasants and the necessary special licenses are issued for this purpose. Intense propagation of pheasants has been carried on by the Department and hundreds of birds released in each Regulated Township, in order to ensure the success of this open season. Hunters, however, must provide themselves with one of the special licenses for the township in which they desire to hunt, and must confine their pheasant shooting to the township for which the license has been purchased.

In addition to the pheasant hunting this special township license entitles the holder to hunt rabbits between November 1st and February 28th in any regulated township within the same county as that for which he possesses a pheasant license.

It will be obvious that such a Regulation provides a measure of control against overcrowding, while at the same time it offers the sportsman extensive hunting facilities within a defined area.

Other forms of hunting in these regulated townships are at the discretion of the controlling organization. Groundhog shooting, for example, may be indulged in only with the written consent of the controlling organization which is usually the township council, and the possession of the groundhog license issued by the Department.

The controlling organization in each area may also authorize the shooting of woodcock during the open season for same, but the hunter must be in possession of the regular gun license issued by the Department and the written approval of the controlling organization.

There is only one exception to the restrictions. It provides that nothing in the regulations "shall in any way apply to prohibit the hunting of wild ducks and wild geese on any Regulated Game Preserve Area where such hunting is carried on in accordance with the provisions of the Migratory Birds Convention Act and Regulations and the Game and Fisheries Act; and except that this provision shall not apply in the Township of Scarborough, County of York." The Township of Scarborough is part of the York Sanctuary for Migratory Birds. The onus of proof that he was duck hunting would be on the hunter and the suitability of the area for such must be established.

The restrictions in these areas do not apply to the trapping of fur-bearing animals, provided such is carried on in accordance with the provisions of the Game and Fisheries Act, and no firearms are used for the purpose.

We hope it will be clear to the sportsman that regulations and restrictions such as are enumerated are the result of changed conditions which must continually be faced. The land is no longer virgin forest; the public domain continues to shrink; and private ownership has rights which must not be abused. Then, too, as the country develops the population increases, and the numbers of those interested in hunting grows apace. This combination of circumstances does not lend itself to that freedom of movement in pursuit of game which has been our privilege for generations past. Gradually, therefore, we have experienced a tightening up in the interest of the game as well as the hunter. In the case of the regulated townships a compromise has been effected, which, if it receives the co-operation of all those most concerned, will do much to foster the good relations which should exist between farmer and hunter.

Additional Townships incorporated into the scheme of Regulated Game Preserve areas during the year 1939, are as follows:—

The Township of Marysburg South, in the County of Prince Edward;
 The Townships of Pickering, Whitby, and Whitby East in the County of Ontario;
 The Townships of Gwillimbury North and Vaughan in the County of York;
 The Townships of Albion and Toronto Gore in the County of Peel;
 The Townships of Esquesing and Nassagaweya in the County of Halton;
 The Township of Puslinch in the County of Wellington;
 The Townships of Middleton and Walsingham North in the County of Norfolk;
 and
 The Townships of Aldborough and Malahide in the County of Elgin.

WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty statistics for the current fiscal year and the three years preceding:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1937	1,090	1,197	31	2,318	\$33,360.63
For year ending Mar. 31, 1938	1,022	837	30	1,889	27,474.24
For year ending Mar. 31, 1939	1,031	723	41	1,795	25,357.00
For year ending Mar. 31, 1940	1,107	614	22	1,743	25,058.12

Bounty is paid under the authority of the Wolf Bounty Act, R.S.O. 1937, chapter 355, which provides for basic rates of bounty, the same as in recent years, viz:—\$15.00 on an adult and \$5.00 on pups under the age of three months. In respect to wolves killed in a County, bounty is paid by the County Treasurer, and forty per cent of such bounty is rebated to the Counties by the Provincial Treasurer. In the northern Districts the total bounty is paid by the Province.

During the fiscal year under review 1,316 claims were considered, in which 1,301 claims were paid. Fifteen claims on animals other than wolves or in cases where insufficient evidence was submitted were rejected.

Bounty was collected by 1,012 persons, who received \$25,925.00 of which \$1,020.00 was paid by Counties and \$24,905.00 by the Province.

Application for bounty was made on 1,753 wolves, 474 of which were killed by farmers, 443 by trappers, 405 by Indians, and the balance by rangers, guides, etc. It has been ascertained from information supplied with the various applications for bounty that 837 of the wolves were taken by snares, 387 by trap, 347 were shot, 84 by methods not reported, and the balance by poison and misadventure. Of the pelts

submitted for bounty sixty-three per cent were timber wolves, thirty-five per cent brush wolves, and two per cent were pups.

The following table sets forth in detail the sources of origin of the various pelts for which application for bounty was made:—

ANALYSIS OF APPLICATIONS FOR WOLF BOUNTY

County or District	Number of Timber	Number of Brush	Number of Pups	Total Pelts
Algoma	143	85	3	231
Bruce	6	6	....	12
Cochrane	24	1	....	25
Elgin	1	....	....	1
Frontenac	3	4	....	7
Grey	2	3	1	6
Haliburton	22	2	....	24
Hastings	9	....	....	9
Huron .....	....	1	....	1
Kenora	272	94	7	373
Kent .....	....	1	....	1
Lambton .....	....	2	....	2
Lanark	8	....	....	8
Lennox and Addington	11	7	....	18
Manitoulin	22	87	11	120
Muskoka	32	2	....	34
Nipissing	111	27	....	138
Norfolk .....	....	4	....	4
Ontario .....	....	1	....	1
Parry Sound	80	2	....	82
Patricia	28	9	....	37
Perth .....	....	1	....	1
Peterboro	6	....	....	6
Rainy River	95	123	....	218
Renfrew	20	1	....	21
Simcoe	12	4	....	16
Sudbury	67	85	....	152
Thunder Bay	137	64	....	201
Victoria .....	....	3	....	3
Wellington .....	....	1	....	1
Totals	1,111	620	22	1,753

Total expenditures which were incurred in connection with the administration of the Wolf Bounty Act were the sum of \$25,058.12, of which as has been previously stated, the sum of \$24,905.00 was actually paid out as bounty, and details of which payments are set forth in the following table:—

Brush Wolves	38 @ \$ 6.00	\$ 228.00
	576 @ \$15.00	8,640.00
	614	\$ 8,868.00
Timber Wolves	75 @ \$ 6.00	\$ 450.00
	1,032 @ \$15.00	15,480.00
	1,107	\$15,930.00
Pups	1 @ \$ 2.00	\$ 2.00
	21 @ \$ 5.00	105.00
	22	\$ 107.00
TOTAL	1,743	\$24,905.00

GENERAL

TOURIST OUTFITTERS:

The licensing of camps in Northern Ontario, in the area provided by the Game and Fisheries Act was continued. The demand for accommodation encouraged some expansion. Sixty-five permits were issued authorizing the establishment of new camps. Six hundred and forty-two camps were licensed—a net increase of twelve per cent.

District	Licenses		
	Non-Resident	Resident	Total
Algoma	9	83	92
Cochrane .....	..	5	5
Kenora	22	123	145
Manitoulin	3	52	55
Nipissing	9	90	99
Parry Sound	6	107	113
Patricia .....	..	2	2
Rainy River	5	22	27
Renfrew .....	..	10	10
Sudbury	3	59	62
Temiskaming .....	..	3	3
Thunder Bay	3	26	29
Total	60	582	642

DEPARTMENTAL BULLETIN:—

Conservation, as applied to wildlife, depends for its success upon public appreciation of wildlife values and an understanding of the necessity for co-operation with the Department in the many phases of its activities designed to ensure that these values will not be impaired. As a means of developing and encouraging both of these factors, the Department prepares and publishes a Bulletin covering all aspects of the conservation programme. It deals with the work of propagation and restoration and the many problems incidental to the protection and development of wildlife. It is intended to be educational as well as informative and contains life history sketches of the more important species of fish and game, as well as editorials emphasizing the value of conservation and the part the public is expected to play in supporting the work of the Department. It is non-technical in language and as a consequence has a wider public appeal. During the year it appeared at regular bi-monthly intervals with a circulation of over 1600 per issue which included the newspapers of the Province and an extensive mailing list of sportsmen and other individuals. As the material published in the Bulletin is frequently quoted in the press its sphere of influence extends beyond the limits of its mailing list.

GAME AND FISHERIES ACT:—

The Game and Fisheries Laws are an important part of the general programme of conservation. They are intended not only to regulate supply and demand, but also to ensure that natural reproductive periods will not be interfered with. Where closed seasons are in effect there is a sound biological or practical reason for same, and where open seasons are restricted it is because the particular species involved will not stand any excessive take over a lengthy period. Limits of catch and size where such are involved, are regulatory measures intended to control by providing for a reasonably equitable distribution of the available resources. A moment's thought will convince even the most indifferent that these regulations are of primary importance in the interest of the sportsman himself and the administration of the resources. That

being so, it is essential that the public should be familiar with them, and that all those who hunt or fish should strictly observe the regulations. To play the game fairly according to the rules is the first essential to good sportsmanship. When, therefore, the public is urged to observe the laws it is a request for co-operation in the management of a valuable trust. Non-observance of the regulations, however unimportant the details may seem, is unfair to that ever-increasing family of sportsmen and nature lovers who conscientiously obey the laws and pursue their recreational pleasures from the highest standard of sportsmanship.

There is an additional reason why the public should accept an ever-increasing share of the responsibility for the protection and proper use of our wildlife resources: we refer to their value—material and recreational. The material worth of this important heritage cannot be properly computed but it is not too much to suggest that thousands of our citizens derive their livelihood either directly or indirectly from this natural resource. The commercial fishing industry, the fur business, transportation companies and tourist caterers—all these are directly interested, but in addition there are the allied industries which supply food, equipment and the requirements of transportation and accommodation. This natural heritage is rich in material wealth, and, being capable of renewing itself, becomes a perpetual annuity which only our own shortsightedness will dissipate.

Amendments enacted by the Legislative Assembly and which became effective during the year included the following provisions:—

- (a) The pelts of bears taken by licensed hunters not to be subject to the payment of royalty when exported or tanned.
- (b) Prohibiting the use of snares for any purpose in the Counties of Dundas, Durham, Glengarry, Lanark and Stormont.
- (c) Applicable in the Counties of Elgin, Haldimand, Middlesex, Oxford, Waterloo, Lambton and Welland, a daily limit of catch of six cotton-tail rabbits and prohibiting the sale or purchase of these animals.
- (d) Prohibited hours for shooting to extend during the period between one-half hour after sunset and one-half hour before sunrise.
- (e) Permitting the use for hunting purposes of an automatic shotgun so permanently plugged as to be capable of holding not more than three shells at one time.
- (f) Prohibiting the possession or use of rifles during the open season for pheasants in areas where the said open season prevails.
- (g) To provide that shipping coupons be attached to deer and moose hides during transportation.
- (h) To provide for the issuing of special permits to authorize the transportation of the skins or pelts of fur-bearing animals by aeroplane or by any other manner other than by express or parcel post; and providing a penalty for any violation of this Section.
- (i) Authorizing non-residents to include not more than fifty wild geese lawfully killed by them among the game they are entitled to export in any one season.
- (j) Providing a penalty of not less than \$10.00 and not more than \$100.00 for each maskinonge taken contrary to the Regulations which apply.
- (k) Making it necessary to secure the approval of the Department before any lease may be issued subsequent to the promulgation of this Regulation granting exclusive fishing rights to any person in any stream or lake which has been stocked with fish by the Department at any time after May 1st, 1934.

ENFORCEMENT SERVICE

To protect the resources which make hunting and fishing possible it is necessary to maintain a large number of law enforcement officers. To curb game law violators is just as essential as restocking our lakes and streams, and the pity is that it should be necessary. The regulations are restrictive only as necessity demands, while the limits are generous enough to satisfy all reasonable requirements. That being so there appears to be little reason for violations, and yet the toll of destruction by illegal means is too high to lightly pass over.

It will be obvious to the sportsman who is concerned with the future of his sport that waste and extravagance are unnecessary evils which tax to the limit the reproductive capacity of our wild life, aided by artificial propagation, to maintain a normal supply to meet what, after all, is an abnormal demand. In order that our fish and game resources may be wisely used for the benefit of the greatest number, protective measures, and protective officers to enforce these regulations are necessary, but these can only function effectively when backed by the co-operation of the sportsman and the weight of public opinion.

This enforcement service is provided by a staff of some ninety regular overseers, whose services are augmented by the co-operation of members of the Ontario Provincial Police Force, while during the critical spring spawning period and in the fall hunting season the services of sixty-two seasonal employees were retained to provide additional patrol in the more important spawning and hunting areas.

Appointments as Deputy Game and Fisheries Wardens were provided to more than nineteen hundred sportsmen who interest themselves in providing whatever assistance it is possible for them to render in securing effective observance of the various provisions of the Game and Fisheries Act and Regulations in the areas in which they reside and visit for recreational purposes, and the value of this co-operation in controlling and preventing the abuse of sporting privileges it is difficult to estimate.

During 1939-40 there were some 1,779 cases in which offenders were apprehended by the various enforcement officers and in which cases various articles of fishing, hunting and trapping equipment, game, fish and the pelts of fur-bearing animals were seized at the time of apprehension. Reference to the various reports of seizure submitted to the Department by the officers concerned indicates that such seizures were made by Game and Fisheries Overseers in 1,578 cases, by Deputy Game and Fisheries Wardens in 75 cases, by members of the Ontario Provincial Police force in 32 cases, while in the remaining 94 cases the seizures were undertaken by co-operative action among Overseers, Deputy Game Wardens and Provincial Police.

Summarized the articles confiscated are as follows:—

Live animals	in 11 cases
Birds, game animals and meat	in 189 cases
Firearms and ammunition	in 651 cases
Fish	in 235 cases
Nets and Fishing equipment	in 257 cases
Fishing tackle (angling)	in 130 cases
Pelts and Hides	in 346 cases
Traps and Trapping equipment	in 179 cases
Water Craft	in 28 cases
Motor Vehicles	in 9 cases
Lights	in 26 cases
Spears	in 71 cases
Miscellaneous articles	in 60 cases

By reason of the fact that various entries are included on some seizures there is some apparent discrepancy in these figures when compared with the actual number of seizures reported. This is explained when it is understood that reports in many cases include traps and pelts, firearms and game, fishing tackle and fish, commercial fishing nets and boats, furs and motor vehicles, traps and pelts, and lights, spears and fish.

Included among the furs which were seized were 325 beaver, 29 fox, 97 mink, 1,067 muskrats, 11 otter, 53 raccoon, 80 weasel and smaller lots of skunk, fisher, marten and bear, while some 82 deer hides were also seized.

The firearms seized included 103 heavy calibre rifles, 286 .22 calibre rifles, 115 single barrel shotguns, 118 double barrel shotguns, 44 repeating shotguns, 2 automatic shotguns, 3 revolvers and 15 air guns.

Prosecution was undertaken in 1,387 cases, the actions being instituted by Game and Fisheries Overseers in 1,315 cases, by Provincial Police in 56 cases, by Deputy Game Wardens in 13 cases and by co-operative action in 3 cases. In 1,303 of these actions convictions were registered, 69 charges were dismissed, and in 15 cases the charges were withdrawn.

THE FISH CULTURE BRANCH

Fish are of absorbing interest to many people. The small boy takes as much pride in his string of perch or catfish as the man in his trout or black bass. Even the angler who has patiently endeavoured to land a fish and returns home empty-handed, carries with him the memory of pleasant and beautiful surroundings. Peaceful hours spent in hopeful vigilance are a wonderful mental incentive and the imagination is given valuable exercise.

The hardy fisherman who wrestles a livelihood from the vast waters of the Great Lakes and other commercially fished waters is chiefly concerned with the size and maintenance of the catch, amount and condition of gear, market value of fish, price of ice, salt, gasoline, and the state of the weather.

Among others interested in Ontario's fish and fisheries are the retailer, consumer and government agencies.

Our Department has been careful to see that the fish are properly conserved and, by means of protective and propagatory measures, the supply has been maintained at a high level.

HATCHERIES AND REARING STATIONS

Facilities were provided during the fiscal year 1939-40 for the hatching, rearing and distribution of fish in a satisfactory and effective manner.

During the year the Department operated twenty-seven hatcheries and rearing stations.

The new trout rearing station at Hill's Lake, vicinity of Charlton, Timiskaming district, was operated for the first time. This station includes a modern fish hatchery of adequate dimensions, consistent with an adequate and suitable water supply. The hatchery proper can accommodate three million trout eggs in a satisfactory manner. Fifteen raceways and four ponds are provided for rearing large numbers of trout to the fingerling and yearling stages. In addition to these a pond is provided for parent trout in order to maintain a satisfactory egg supply, thus making the hatchery self-sustaining.

Temporary and subsidiary ponds were constructed in the vicinity of Brighton, Northumberland county, to accommodate surplus trout during the fry and fingerling stages.

The Belleville fish hatchery was dismantled since the operations conducted there can be carried out more economically and effectively at the Glenora fish hatchery, by making use of the Belleville equipment.

The construction of ponds for bass propagation is of very great value by supplementing the work of nature in maintaining this very desirable game fish. Three additional ponds were used for bass propagation at the Sandfield station, Manitoulin Island, five at the Skeleton Lake station, Ullswater, Muskoka district, and one in the vicinity of Havelock, Peterborough county. Nine of these ponds were used for wintering trout fingerlings for distribution as yearlings the following spring.

A hatchery and pond located at the outlet of Deer Lake, vicinity of Havelock, Peterborough county, were successfully used for the first time for the propagation of maskinonge, in conjunction with a minnow forage pond. In addition to this, a suitable area comprising approximately ten acres was set aside on Stony Lake, Peterborough county, for the purpose of studying in an experimental way the conditions required for the successful production of maskinonge in natural areas.

THE CULTURE AND DISTRIBUTION OF FISH

Generally speaking, excellent progress was made in the culture and distribution of the various species of fish handled. In this regard particular mention is made of speckled trout, brown trout, small-mouthed black bass, maskinonge and yellow pickerel, since the year's distribution of these species surpassed all previous records. For the first time in the history of the Department, maskinonge were reared to sizeable fingerlings by the pond method.

Speckled Trout:

The following statistics indicate the success being achieved and the progress made in regard to the culture and distribution of yearling and older stages of this important native fish.

1936	563,351
1937	1,183,223
1938	2,087,990
1939	2,982,874

In 1939, three hundred and thirty-seven thousand fingerlings were also distributed. The distribution of fingerlings is undertaken if the number on hand cannot be accommodated in the hatcheries.

Brown Trout:

During the year, 375,070 yearlings and 29,954 fingerlings were planted in suitable streams in southern Ontario. The number of yearlings planted was more than six times that of the previous year. A comparatively small number of fingerlings were also planted. The result of the distribution of brown trout on the fishing in streams of southern Ontario is most encouraging.

Rainbow Trout:

(a) Steelhead trout

Good progress was made in regard to the rearing of rainbow trout yearlings; an increased production of 244 per cent was obtained as compared with that of the previous year.

(b) Kamloops trout

An increased distribution of fingerlings of this valuable game fish, amounting to 306.6 per cent, was obtained. The plan suggested in the previous annual report of the Department, namely, to plant yearlings of this variety is being developed satisfactorily and may be realized next year.

Lake Trout:

There was a decrease of 10 per cent in the distribution of the sum total of eyed eggs and fry; and a decrease of 5.8 per cent in the distribution of fingerlings.

Rough and stormy weather on the Great Lakes in the fall of 1938 was responsible to a great extent for this reduction. The Department relies entirely on the collection of lake trout spawn by the commercial fishermen, assisted by the Department's hatchery officers and spawntaking crews.

Whitefish:

There was an increase of approximately 0.9 per cent in the distribution of whitefish fry as compared with that of the previous year.

Herring:

The distribution of herring fry was reduced by 22.5 per cent. Fluctuations in the number of herring fry available from year to year may be correlated with the size of the run and weather conditions.

Yellow Pickerel:

There was an increased distribution of fry amounting to approximately 20.6 per cent over that of the previous year.

Following the usual practice approximately two million eyed eggs were handled by the Sparrow lake hatchery, the fry being distributed in suitable places in Sparrow lake.

Eyed pickerel eggs were exchanged with the State of Pennsylvania for eyed brown trout eggs.

Small-mouthed Black Bass:

Exceptionally good progress was made in the culture of small-mouthed black bass. The percentage increases of fry and fingerlings were 72.4 and 33.3 per cent, respectively.

As a result of bass harvesting operations, approximately the same number of yearlings and adults were distributed as in the previous year. The harvesting operations were carried out on Fox Lake, Kenora district; Bass lake, Rainy River district; and Little Gull Lake, Haliburton county.

A number of large-mouthed black bass fingerlings were harvested from Wiltse Creek, Leeds county, and Stony lake, Peterborough county.

Yellow Perch:

The distribution of perch fry showed an increase of 22.3 per cent over that of the previous year, due to a good run of this desirable commercial species in the vicinity of their natural spawning grounds at the west end of Lake Erie.

The perch eggs were collected in the vicinity of Kingsville under supervision of our hatchery officers, and cultured to the fry stage in the Kingsville hatchery. In view of the commercial value of the perch, this work is of considerable importance.

Maskinonge:

The distribution of maskinonge fry was approximately 33.4 per cent greater than that of the previous year. This was due to the successful operation of the new hatchery located at the outlet of Deer Lake, vicinity of Havelock, Peterborough county.

For the first time in the history of the Department, maskinonge fingerlings (three to eight inches in length) were reared by the pond method. Although the number reared, namely 1,300, appears small, it should be remembered that this was an initial trial, and gives promise of greater success in the future.

Our previous experiments revealed that there were two important factors which should not be overlooked in the culture of maskinonge, namely:

- (1) Providing a suitable and abundant food supply
- (2) Preventing cannibalism, which invariably occurs in the absence of protection or lack of proper food staples.

A culture of *Daphnia* was introduced and the pond was fertilized with suitable quantities of sheep manure and superphosphate throughout the season. A typical maskinonge environment was simulated as closely as possible by planting aquatic and semi-aquatic vegetation. Special efforts were made to provide as much leafy vegetation as possible in order to protect the young maskinonge from each other and from other predators.

A small pond adjacent to the maskinonge pond was used for the culture of the blackhead minnow. The progeny of this important forage fish was used as food for the growing maskinonge throughout the season. It was found necessary to supplement the food requirements with minnows harvested from natural waters.

In addition to this experiment, an effort was made to determine the possibilities of rearing maskinonge to fingerling sizes in a natural area. Dr. Paul F. Elson of the Department of Biology, University of Toronto, undertook this particular phase of the field work under the supervision of the Department. The area selected was a marshy bay about ten acres in extent, located on Stony Lake in the vicinity of Burleigh Falls, Peterborough county. The area was closed off from adjacent waters by barriers across the two ends, which were respectively 50 feet and 150 feet wide. Screens were placed in the barriers to allow circulation of water. The area is a natural spawning ground for maskinonge and, hence, should be suitable for raising these fish. The water throughout the area is from three to five feet deep; the bottom is deep muck, permitting a rich growth of weeds. When the area was closed off, coarse fish and other predators were netted out, sometime before and after the maskinonge fry were planted. Altogether 17,883 coarse fish and 563 turtles were removed from the area. Less than one-third of the coarse fish, and slightly over one-half of the turtles, were removed previous to the planting of the maskinonge fry. On June 4th, 100,000 maskinonge fry, about three weeks old, and approximately five-eighths of an inch long, were planted throughout the area in locations where natural food was most abundant. At this time they were feeding on small aquatic animals, including water fleas. These crustacea were present in vast swarms near patches of cat-tail and marsh grass. About mid-June the maskinonge commenced to feed on minnow fry, which were abundant. Growth of the young maskinonge under natural conditions is amazing, as is indicated by the following table:

Date	June 6	July 5	Aug. 1	Sept. 1	Oct. 1	Nov. 1
Length of fish in inches	5/8"	3"-5"	4"-7"	6"-8"	7"-9"	8"-11½"

Seventeen fish taken in November averaged between 9½ to 10 inches in length. The results of the first season's work may be summed up as follows:

1. The rate of growth is very rapid during the first six months, the fish reaching a length of approximately ten inches by that time.
2. A study of the food of the growing maskinonge showed that the areas furnished abundant food for the very young and more advanced stages.
3. The young maskinonge remain in the area until the first of November which indicates the advisability of planting hatchery raised fish in such areas.
4. Large numbers of undesirable predators occur in such areas.
5. Eighty-one advanced fingerlings were recovered, that is, a yield of 0.8 advanced fingerlings for each 1,000 fry planted. It is believed that a considerable number of fingerlings were not recovered. Many predator fish, namely, perch and rock bass remained in the area throughout much of the experiment and these would undoubtedly cut down the yield.
6. It is safe to say that while the results obtained the first year of the experiment were promising, much better results might be expected.
7. There is evidence to show that there is a migration of fish from such areas in the fall and that sometime during the first year the maskinonge move out, and that these movements might be used to advantage for harvesting purposes.

CLOSED WATERS

One of the most promising methods of conserving the breeding stock of black bass and maskinonge is to set aside portions of natural water areas. In these areas the fish thrive without interference and spread to other parts of the same stream or lake. In this way a permanent breeding stock is set up and we take each year only the natural increase from it.

Closures of all such areas (with one exception) in the Kawartha watershed were extended for a further period, and the same principle is being extended to important sections of the Rideau watershed.

In addition to the waters already closed for the natural protection and propagation of fish, the following were closed during the year, April 1, 1939, to March 31, 1940:

BLACK RIVER,

Townships of Charlottenburg, County of Glengarry, Annual Closure, May 15 to June 20, inclusive.

CRAFT'S CREEK,

Townships of Mountjoy, Jessop and Murphy, District of Cochrane.

DEEP BAY,

Township of Matchedash, County of Simcoe.

EMERALD LAKE,

Township of Parkman, District of Nipissing.

FINNIE'S CREEK,

Townships of Charlottenburg and Lancaster, County of Glengarry, Annual closure, May 15 to June 20, inclusive.

LITTLE JOCKO RIVER,

West from Timiskaming Road, known as Morrow's Dam, east to the outlet in the big Jocko River, District of Timiskaming.

NASH'S CREEK or HOASIE'S CREEK

Township of Williamsburg, County of Dundas, during the closed season for black bass.

- OPINICON LAKE (Portion locally known as Drowned Land),
Township of Crosby South, County of Leeds.
- OSBORNE, RAINBOW and HILL LAKES,
Township of Bridgland, District of Algoma.
- PUMPHOUSE CREEK,
Townships of Cartier and Hart, District of Sudbury.
- SUTHERLAND'S CREEK,
Township of Lancaster, County of Glengarry,
Annual closure, May 15 to June 20, inclusive.
- WOODCOCK LAKE,
West of Restoule Lake in the Township of Patterson, District of Parry Sound.

BIOLOGICAL SURVEYS

Biological surveys were conducted in **Timiskaming district** on Bear, Beaverhouse, Butler, Crystal, Dorothy, Joyce, Lawgraves, Mousseau and Sinkhole lakes, tributaries and headwaters of Boston creek, tributary of Crooked creek; in **Cochrane district** on Bobs, Eleexo, Fahy, Graves, Horseshoe, Jean, Mary and Tom lakes, Jacob's creek; and in **Peel county** on Caledon lakes, Caledon township.

The lagoons of Toronto Islands were studied to determine their suitability for large-mouthed black bass.

Catfish creek in the vicinity of Aylmer was studied from the standpoint of the effects of effluents from gas wells on fish life.

A study was made of the effect of a dam at the outlet of Buck Lake, Bedford township, Frontenac county, on the fish and aquatic life in the lake.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, continued field and laboratory studies of lakes and streams in Algonquin Park during 1939-40. An account of this important work was embodied in the report of the previous year.

ACKNOWLEDGMENTS

It is but fitting that acknowledgment be made of the splendid co-operation and assistance received from the many Fish and Game Protective Associations throughout the Province as well as from the Northern Ontario Tourist Trade Association, and the members of both groups. The result of this organized effort among those directly interested in our fish and game resources is reflected in the general attitude of sportsmen towards the protection of this division of our Provincial natural resources. Never before has the public generally been more conservation minded, and the part played by these Associations in bringing about this happy state of affairs is greatly appreciated.

Members of the inside staff as well as the field service of the Department have as a general rule performed their duties conscientiously, and in their dealings with the public have been courteous and helpful, having in mind the various interests and activities of the Department.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

Toronto,
March 31st, 1941.

D. J. TAYLOR,
Deputy Minister of Game and Fisheries

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
APRIL 1st, 1939, to MARCH 31st, 1940.

LARGE-MOUTHED BLACK BASS

FINGERLINGS

Halton:
Twelve Mile Creek 1,200

Peterborough:
Upper Stony Lake 690

ADULTS

Peterborough:
Stony Lake 497

SMALL-MOUTHED BLACK BASS

FRY

Bruce:
Chesley Lake 10,000
Saugeen River 10,000

Carleton:
Ottawa River 15,000

Frontenac:
Crow Lake 5,000
Loughborough Lake 5,000
Sydenham Lake 5,000

Hastings:
Baptiste Lake 10,000
Bass Lake 10,000
Big Salmon Lake 5,000
Burnt Lake 5,000
Crow River 5,000
Gull Lake 5,000
Gunter Lake 5,000
Jordon Lake 5,000
Moir Lake 10,000
Moir River 10,000
Oak Lake 10,000
Otter Lake 10,000
Parks Creek 5,000
Pine Lake 5,000
Spring Lake 5,000
Stoco Lake 5,000
Tongamong Lake 5,000
Trent River 10,000
Trout Lake 5,000
Wadsworth Lake 5,000
Woods Lake 5,000

Huron:
Lake Lakelet 10,000

Lambton:
Sydenham River 20,000

Lanark:
Long Lake 5,000
Mississippi Lake 10,000
Mississippi River 5,000
Pike Lake 5,000

Lennox-Addington:

Beaver Lake (South) 5,000
Cedar Lake 5,000
Donohue Lake 5,000
Duck Lake 5,000
Lime Lake 5,000
Loon Lake 5,000
Salmon River 5,000
Shircliff Lake 5,000
Weslemkoon Lake 5,000
White Lake 5,000

Muskoka:

MacKay Lake 5,000
Prospect Lake 5,000

Norfolk:

Little Lake 10,000

Northumberland:

Silver Lake 20,000
Trent River 60,000

Ontario:

Lake St. John 20,000

Parry Sound:

Bass Lake 5,000
Blackstone Lake 5,000
Clear Lake 5,000
Crane Lake 5,000
Hammers Lake 5,000
Horseshoe Lake 5,000
Isabella Lake 5,000
Lake Joseph 5,000
Lake Rosseau 5,000
Lynch Lake 5,000
Massie Lake 5,000
Portage Lake 5,000
Rainey Lake 5,000
Rankins Lake 5,000
Ruth Lake 5,000
Silver Lake 5,000
Sucker Lake 5,000
Trout Lake 5,000
Turtle Lake 5,000
Wolf Lake 5,000

Peterborough:

Barney's Lake 5,000
Big Beaver Lake 5,000
Big Cedar Lake 5,000
Buckhorn Lake 15,000
Catchacoma Lake 5,000
Chemong Lake 10,000
Clear Lake 10,000
Connelly Lake 5,000
Cox Lake 5,000
Crab Lake 5,000
Crystal Lake 10,000
Deer Bay 10,000
Deer Lake 5,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940.

SMALL-MOUTHED BLACK BASS

—Continued

Peterborough—Continued

Eel's Lake	15,000
Indian River	5,000
Jack's Lake	15,000
Kashnabog Lake	10,000
Katchewanooka Lake	5,000
Little Lake	10,000
Little Cedar Lake	5,000
Little Mud Lake	5,000
Little Trout Lake	10,000
Long Lake	5,000
Loon Lake	10,000
Lovesick Lake	10,000
Mississauga Lake	5,000
Mississauga River	5,000
Oak Lake	10,000
Otonabee River	5,000
Pencil Lake	5,000
Pigeon Lake	10,000
Salmon Lake	20,000
Sandy Lake	5,000
Stony Lake	5,000
Trent River	5,000
Trout Lake	5,000
Twin Lakes	5,000
White Lake	10,000

Prince Edward:

Black Lake	10,000
Roblins Lake	5,000
West Lake	10,000

Renfrew:

Barry's Bay	10,000
Calabogie Lake	10,000
Constant Lake	5,000
Hurd's Lake	10,000
Jack's Chutes	15,000
Madawaska River (Hydes' Bay)	10,000
Mink Lake	10,000

Simcoe:

Black Lake	10,000
Deep Bay Sanctuary	20,000
Gloucester Pool	20,000
Kempenfeldt Bay	20,000
Little Lake	20,000
Six Mile Lake	20,000

Sudbury:

Ella Lake	6,000
Fairbanks Lake	5,000
Johnny Lake	5,000
Lake Agnew	7,500
Lake Penage	10,000
Whitewater Lake	7,500

Victoria:

Balsam Lake	20,000
Burnt River	20,000
Cameron Lake	40,000
Head Lake	10,000
Lake Dalrymple	30,000

Mud Turtle Lake	30,000
Pigeon Creek	20,000
Pigeon Lake	20,000
Silver Lake	10,000
Smudge Lake	20,000
Sturgeon Lake	30,000

Waterloo:

Grand River	10,000
Paradise Lake	10,000
River Nith	10,000

Wellington:

Allan's Dam	10,000
Puslinch Lake	10,000
River Speed	10,000

York:

Lake Simcoe	20,000
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FINGERLINGS

Algoma:

Alma Lake	500
Appleby Lake	500
Bass Lake (Aberdeen)	750
Bass Lake (Striker)	500
Birch Lake	500
Boundary Lake	500
Caribou Lake	500
Carpenter Lake	500
Cloudy Lake	500
Cummings Lake	500
Darrell Lake	500
Desbarats Lake	750
Diamond Lake	500
Duborne Lake	500
Duck Lake	500
Elbow Lake	500
Friendly Lake	750
Gordon Lake	1,000
Iron Lake	750
Lauzon Lake	500
Little Clear Lake	500
Lonely Lake	750
Lost Lake	500
Marie Lake	500
McCarroll Lake	500
Miller Lake	500
Mine Lake	500
Mountain Lake	500
Prospect Lake	500
Rock Lake	500
Stuart Lake	500
Unnamed Lake (U. Tp.)	500

Brant:

Grand River	65
Mohawk Lake	2,000

Bruce:

Berry's Lake	1,000
Boat Lake	1,000
Isaac Lake	1,000
Pine River	1,000
Saugeen River	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SMALL-MOUTHED BLACK BASS		Hastings:	
—Continued			
Cochrane:		Bow Lake	500
Departure Lake	500	Gunter Lake	500
Durham:		Little Salmon Lake	500
Pigeon River	1,000	Huron:	
Elgin:		Maitland River	1,000
Pinafore Lake	500	Lanark:	
Union Pond	500	Bennet Lake	1,000
Frontenac:		Black Lake	750
Bass Lake (Olden)	500	Christie Lake	1,000
Bass Lake (Bedford)	1,000	Clear Lake	500
Big Clear Lake	1,000	Dalhousie Lake	750
Big Gull Lake	1,000	Kerr's Lake	750
Big Lake	750	Patterson's Lake	750
Black Lake	750	Rideau Lake	1,000
Blue Lake	500	Robertson Lake	500
Bobs Lake	1,000	Round Lake	750
Brule Lake	1,000	Silver Lake	1,000
Buck Lake	3,000	Spectacle Lake	500
Collins Lake	1,000	Leeds:	
Cranberry Lake	1,000	Benson Lake	1,000
Cross Lake	1,000	Big Rideau	750
Crotch Lake	1,000	Charleston Lake	1,000
Crow Lake	1,000	Crow Lake	750
Draper Lake	1,000	Gananoque Lake	750
Eagle Lake	1,750	Grippen Lake	750
Fortune Lake	1,000	Little Cranberry Lake	1,000
Green Bay	500	Little Rideau	500
Gull Lake	1,250	Loon Lake	750
Horseshoe Lake	1,000	Lower Beverley Lake	750
Kashwakamak Lake	1,000	Lower Rideau	1,000
Long Lake (Olden)	1,000	Newboro Lake	1,000
Long Lake (Portland)	500	Opinicon Lake	1,000
Loughborough Lake	1,000	St. Lawrence River	2,500
Mink Lake	500	Sand Lake	1,500
Mississagagon Lake	2,000	Singleton Lake	500
Pine Lake	750	South Lake	750
Rock Lake	500	Traynor Lake	750
St. George Lake	500	Whitefish Lake	1,000
Salmon River	1,000	Lennox-Addington:	
Sand Lake	1,000	Mazinaw Lake	1,000
Sharbot Lake	1,000	Manitoulin:	
Spectacle Lake	500	Manitou Lake	1,000
Sunday Lake	1,000	McGregor Bay	2,000
Sydenham Lake	1,000	Middlesex:	
Wolfe Lake	1,000	Thames River	10,000
Grey:		Muskoka:	
Mountain Lake	1,000	Bass Lake	750
Haldimand:		Clearwater Lake	750
Grand River	3,000	Crooked Lake	2,000
Haliburton:		Dickie Lake	1,000
Black Lake	750	Kahshe Lake	500
Devils Lake	500	Leonard Lake	500
Gull Lake	500	Long Lake	500
Halton:		Longford Lake	2,000
Twelve Mile Creek	2,000	Menominee Lake	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

SMALL-FOUMED BLACK BASS
—Continued

Muskoka—Continued

Muskoka Lake	500
Riley Lake	500
Round Lake	1,000
Severn River	2,000
Six Mile Lake	2,000
Tookes Lake	1,000
Trading Lake	200

Nipissing:

Bear Lake	1,500
Blackwater Lake	500
Bruce Lake	1,000
Cache Lake	500
Champlain Lake	500
Chibogamog Lake	500
French River	1,500
Little Martin Lake	1,000
Long Lake	1,000
Martin Lake	1,000
McPhee Lake	1,000
Moore Lake	500
Muskosung Lake	500
Nipissing Lake	2,500
Nosbonsing Lake	500
Opechee Lake	1,000
Poplar Lake	1,000
Rainey Lake	500
Rock Island Lake	1,000
Sawyer Lake	500
Spruce Lake	1,000
Talon Lake	1,000
Tilden Lake	1,000
Timagami Lake	1,000
Tomiko Lake	1,000
Turtle Lake	500
Wickstead Lake	1,000

Norfolk:

Oakland Pond	210
Sutton's Pond	3,000

Ontario:

Mud Lake	1,000
Severn River	1,000

Parry Sound:

Ahmic Lake	500
Arthur Lake	500
Bass Lake	750
Beaver Lake (Bethune)	500
Beaver Lake (Croft)	500
Beaver Lake (Foley)	500
Blackwater Lake	500
Brimson Lake	500
Burnt Lake	500
Caribou Lake	500
Cecebe Lake	500
Charter Lake	750
Clear Lake	750
Coles Lake	500
Commanda Lake	750
Crooked Lake	750

Deer Lake (Ferry)	500
Deer Lake (Lount)	1,000
Deer Lake (Wilson)	500
Dobbs Lake	750
Doe Lake	500
Duck Lake	500
Eagle Lake	2,000
Etta Lake	500
Horseshoe Lake	500
Island Lake	750
Kawigamog Lake	500
Kidd Lake	500
Little Clam Lake	500
Little Long Lake	500
Long Lake	750
Manitowaba Lake	500
Many Island Lake	500
Mary Jane Lake	500
McQuaby Lake	500
McVeety Lake	500
Memesagamesi Lake	1,000
Miners Lake	750
Moose Lake	500
Morgan's Bay	1,000
Mud Lake	500
Nipissing Lake	500
Pickarel Lake	500
Pickarel River	500
Pipe Lake	500
Portage Lake	500
Rainey Lake	750
Restoule Lake	750
Round Lake	500
Seagull Lake	500
Sequin River	500
Shebeshekong Lake	500
Shells Lake	500
Shoal Lake	750
Spring Lake	500
Stanley Lake	750
Stormy Lake	750
Tea Lake	750
Toad Lake	500
Wilson Lake	500
Wolf River	500
Woodcock Lake	500

Peterborough:

Belmont Lake	850
Buckhorn Lake	1,000
Round Lake	1,000
Stony Lake	2,000

Renfrew:

Green Lake	750
Lake Dore	1,000
Olmstead Lake	1,000

Simcoe:

Gloucester Pool	1,000
Nottawasaga River	1,000
Park Lake (Tay Township)	1,000

Stormont:

St. Lawrence River	1,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SMALL-MOUTHED BLACK BASS**—Continued****Sudbury:**

Beaver Lake	500
Bowes Lake	500
Charlton Lake	500
Cranberry Lake	500
Cutler Lake	500
Emerald Lake	1,000
French River	1,000
Frood Lake	500
LaCloche Lake	500
Maple Lake	500
Nepahawin Lake	500
Nipissing Lake	500
Ramsay Lake	500
Third Lake	750
Trout Lake	500
Wanapitei River	500
Whitson Lake	500

Timiskaming:

Baarts Lake	500
Bass Lake	500
Beaverhouse Lake	500
Butler Lake	500
Davis Lake	500
Emerald Lake	500
Herridge Lake	500
Sesekinika Lake	500
Victoria Lake	500

Waterloo:

Dean's Lake	1,000
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York:

Lake Simcoe	750
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YEARLINGS AND ADULTS**Bruce:**

Wiarton Bay	150
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Haliburton:

Big Bob Lake	125
Blue Hawk Lake	125
Bradys Lake	125
Canning Lake	125
Cranberry Lake	125
Davis Lake	125
Deer Lake	90
Elephant Lake	130
Grass Lake	125
Grass River	125
Head Lake	130
Horseshoe Lake	125
Hurricane Lake	130
Kashagawigamog Lake	225
Koshlong Lake	125
Rainbow Lake	130

Kenora:

Birch Lake	100
Corner Lake	38
Dryberry Lake	78
Eva Lake	80
Laurenson's Lake	60
Long Lake	37
Longbow Lake	98
Mack Lake	113
Sabaskong Bay	399
Landlocked Lake—Winnipeg River	85

Manitoulin:

Lake Manitou	468
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Muskoka:

Buck Lake	100
Clearwater Lake	100
Deer Lake	100
Lake Muskoka	100
Lake Rosseau	100
Skeleton Lake	220
Wood Lake	100

Norfolk:

Gravel Pit Pond	50
Little Lake	56
Oakland Pond	23
Sutton's Pond	100
Waterford Gravel Pit Pond	100
Waterford Pond	100

Parry Sound:

Beaver Lake	100
Gooseneck Lake	100
Jack's Lake	100
Limestone Lake	100
Loon Lake	100
Magnetawan River	100
Manson Lake	100
Shawanaga Lake	100
Trout Lake	100
Wawashkesh Lake	100
Whitstone Lake	100

Peterborough:

Belmont Lake	53
Deer Lake	52
Round Lake	51
Stony Lake	17

Rainy River:

Clearwater Lake	125
Little Pete Lake	360
One-Sided Lake	206

Thunder Bay:

Kashabowie Lake	135
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

MASKINONGE		Prince Edward:	
EGGS		Muscote Bay	25,000
Peterborough:		Smith's Bay	25,000
Experimental purposes	120,000	West Lake	15,000
FRY		Renfrew:	
Carleton:		Bass Lake	10,000
Rideau River	25,000	Black Lake	15,000
Grenville:		Cory Lake	15,000
Rideau River	25,000	Cushene Lake	15,000
Hastings:		Otterson Lake	10,000
Bay of Quinte	10,000	Petawawa River	10,000
Crow River	15,000	Redbridge Lake	20,000
Ketcheson Creek	5,000	Simcoe:	
Moir Lake	25,000	Seyn River	50,000
Moir River	25,000	Thunder Bay:	
Sears Lake	15,000	Lac des Mille Lacs	5,000
Stoco Lake	25,000	Victoria:	
Tongamong River	25,000	Balsam Lake	50,000
Trent River	25,000	Burnt River	25,000
Unnamed Stream near		Cameron Lake	75,000
Frankford	5,000	Gull River	25,000
Whetstone River	25,000	Lake Dalrymple	25,000
Leeds:		Mud Turtle Lake	25,000
St. Lawrence River	25,000	Pigeon Creek	50,000
Muskoka:		Pigeon Lake	50,000
Kahshe Lake	25,000	Pigeon River	200,000
Sparrow Lake	25,000	Scugog Lake	50,000
Nipissing:		Silver Lake	15,000
Lake Nipissing	25,000	Sturgeon Lake	150,000
Northumberland:		Waterloo:	
Rice Lake	100,000	Nith River	15,000
Trent River	130,000	Wentworth:	
Ontario:		Hamilton Bay	5,000
Lake St. John	20,000		
Peterborough:		FINGERLINGS	
Belmont Lake	50,000	Peterborough:	
Buckhorn Lake	50,000	Belmont Lake	30
Clear Lake	200,000	Clear Lake	70
Deer Bay	100,000	Katchawanooka Lake	500
Indian River	50,000	Pigeon Lake	500
Kashabog Lake	25,000	Stony Lake	200
Katchawanooka Lake	65,000	PERCH	
Lake Chemong	100,000	FRY	
Little Lake	10,000	Lake Erie	70,360,000
Little Mud Lake	25,000	Lake St. Clair	2,000,000
Lovesick Lake	50,000	PICKEREL	
Otonabee River	50,000	EYED EGGS	
Pigeon Lake	100,000	Exchange	5,000,000
Round Lake	50,000	Sparrow Lake	2,000,000
Stony Lake	100,000		
Trent River & Rice Lake ..	50,000		
White Lake	25,000		

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

PICKEREL—Continued

FRY

Algoma:

Allan Lake	700,000
Anigami Lake	200,000
Bear Lake	400,000
Bright Lake	250,000
Caribou Lake	200,000
Cummings Lake	250,000
Dean Lake	100,000
Desbarats Lake	150,000
Echo Lake	100,000
Gordon Lake	400,000
Goulais River	300,000
Granary Lake	500,000
Hill Lake	150,000
Horseshoe Lake	250,000
Lake of the Mountains	300,000
Little Basswood Lake	500,000
Little Clear Lake	500,000
Pipe Lake	250,000
Rock Lake	450,000
Round Lake	100,000
Spanish River	500,000
Sugar Lake	250,000

Bruce:

Agar Lake	500,000
Boat Lake	250,000
Chesley Lake	500,000
Isaac Lake	500,000
Sky Lake	250,000

Carleton:

Ottawa River	500,000
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Cochrane:

Carman Bay	60,000
Frederick House Lake	80,000
Frederick House River	250,000
Night Hawk River	80,000
Redstone River	60,000
Reid Lake	70,000
Remi Lake	200,000
Silver Queen Lake	80,000

Frontenac:

Antoine Lake	250,000
Bass Lake	200,000
Big Clear Lake	300,000
Big Gull Lake	850,000
Big Lake	200,000
Bobs Lake	750,000
Crosby Lake	500,000
Cross Lake	300,000
Crotch Lake (Kennebec) ..	200,000
Crotch Lake (Palmerston) ..	800,000
Crow Lake	250,000
Green Lake	300,000
Green Bay Lake	250,000
Gull Lake	850,000
Horseshoe Lake	200,000
Kashwakamak Lake	1,250,000
Long Lake (Olden)	200,000

Long Lake (Portland)	250,000
Malcolm Lake	300,000
Mink Lake	500,000
Mississagagon Lake	500,000
Mississippi River	1,000,000
Red Pine Lake	250,000
Round Lake	250,000
Sand Lake	250,000
Second Depot Lake	100,000
Sydenham Lake	400,000
Upper Rideau	1,000,000
West Rideau	250,000

Grenville:

Nation River	500,000
Rideau River	500,000

Grey:

Mountain Lake	250,000
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Haldimand:

Grand River	1,000,000
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Haliburton:

Cauntaus Lake	1,000,000
Elephant Lake	1,000,000
Paudash Lake	1,500,000
Wolf Lake	1,000,000

Hastings:

Baptiste Lake	800,000
Bartlett's Lake	150,000
Crow Lake	1,500,000
Fraser Lake	200,000
Lime Lake	100,000
Mallard Lake	200,000
Moirs Lake	800,000
Moirs River	1,000,000
Salmon Trout Lake	200,000
Sears Lake	100,000
Stoco Lake	300,000
Trent River	1,000,000

Kenora:

Black Sturgeon Lake	6,000,000
Blindfold Lake	3,000,000
Bowden Lake	750,000
Cache Lake	500,000
Eagle Lake	2,000,000
Gun Lake	1,000,000
Lake Lulu	1,500,000
Lake of Two Mountains	1,500,000
Lake of the Woods	29,000,000
Long Bow Lake	1,500,000
Separation Lake	750,000
Shoal Lake	6,000,000
Wabigoon Lake	2,000,000
Winnipeg River	4,500,000

Lanark:

Barbers Lake	200,000
Beaver Lake	300,000
Bennet's Lake	425,000
Black Lake	250,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

PICKEREL—Continued

Lanark—Continued

Caldwell Lake	200,000
Christie Lake	500,000
Clear Lake	250,000
Dalhousie Lake	325,000
Gillies Lake	250,000
Horns Lake	200,000
Kerrs Lake	400,000
Little Joe's Lake	200,000
Mississippi Lake	600,000
Mississippi River	650,000
Otty Lake	600,000
Patterson's Lake	300,000
Rivens Lake	200,000
Robertson Lake	200,000
Spectacle Lake	250,000

Leeds:

Bass Lake	400,000
Crow Lake	200,000
Higgley Lake	500,000
Little Rideau	600,000
Loon Lake	200,000
St. Lawrence River	1,000,000
Sand Lake	250,000
Traynor Lake	200,000
Wolfe Lake	250,000

Lennox-Addington:

Beaver Lake	200,000
Duck Lake	200,000
Long Lake	600,000
Mazinaw Lake	600,000
Napanee River	4,000,000
North Beaver Lake	350,000
Salmon Lake	1,000,000
Sixth Lake	600,000
South Beaver Lake	350,000
White Lake	350,000

Manitoulin:

Burnt Lake	500,000
Mindemoya Lake	1,500,000
South Bay	500,000

Muskoka:

Axel's Lake	100,000
Bala Bay	1,000,000
Bear Trail Lake	50,000
Brandy Lake	500,000
Crooked Lake	500,000
Gull Lake	500,000
Indian River	250,000
Kahshe Lake	250,000
Leonard Lake	450,000
Long Lake	30,000
Mootes Lake	50,000
Muskoka Lake	300,000
North Lake	50,000
Riley Lake	250,000
Severn River	750,000
Three Mile Lake	500,000
Webster Lake	250,000

Nipissing:

Bouveau River	200,000
Bruce Lake	250,000
Diamond Lake	140,000
French River	2,000,000
Gull Lake	140,000
Horseshoe Lake	70,000
Lake Champlain	50,000
Lake Nipissing	2,250,000
Lake Timagami	2,000,000
Marion Lake	70,000
Martin Lake (Gladman)	500,000
Martin Lake (Sisk.)	250,000
Martin River	280,000
McPhee Lake	300,000
Moose Lake	70,000
Nosbonsing Lake	80,000
Opechee Lake	250,000
Pimisi Lake	200,000
Sheeby Lake	70,000
Talon Lake	80,000
Tilden Lake	50,000
Tomiko Lake	280,000
Twin Lakes	250,000
Wasaksina Lake	140,000
Wickstead Lake	500,000

Northumberland:

Mud Lake	400,000
Rice Lake	1,500,000
Trent River	4,600,000

Ontario:

Lake St. John	250,000
Mud Lake	250,000
Severn River	500,000

Parry Sound:

Ahmic Lake	100,000
Bass Lake	200,000
Beaver Lake (Croft)	50,000
Blackstone Lake	600,000
Brimson Lake	200,000
Callander Bay	1,500,000
Caribou Lake	30,000
Cecebe Lake	80,000
Clear Lake	200,000
Commanda Lake	250,000
Crane Lake	200,000
Crooked Lake	200,000
Deer Lake	50,000
Dobbs Lake	50,000
Doe Lake	100,000
Duck Lake	20,000
Isabella Lake	300,000
Jacks Lake	80,000
Kawigamog Lake	80,000
Lake of Many Islands	50,000
Lennon Lake	200,000
Little Long Lac	30,000
Long Lake	50,000
Loon Bay	500,000
Magnetawan River	280,000
Manitowaba Lake	500,000
Manson Lake	250,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

PICKEREL—Continued

Parry Sound—Continued

McKellar Lake	400,000
McKeown Lake	100,000
McVeety Lake	200,000
Memesagamesi Lake	100,000
Minerva Lake	200,000
Nipissing Lake	2,900,000
Oastler Lake	500,000
Otter Lake	750,000
Owl Lake	300,000
Pickerel Lake	200,000
Pickerel River	130,000
Potage Lake	500,000
Rainy Lake	250,000
Restoule Lake	700,000
Rosseau Lake	1,500,000
Ruth Lake	100,000
Shawanaga Lake	100,000
Shesheskong Lake	70,000
Shoal Lake	200,000
Six Mile Lake	70,000
Squaw Lake	400,000
Stanley Lake	50,000
Stewart Lake	200,000
Stormy Lake	200,000
Tea Lake	150,000
Third Lake	200,000
Wawashkesh Lake	1,500,000
Whitestone Lake	300,000
Wilson Lake	60,000
Wolfe River	30,000

Peterborough:

Belmont Lake	1,500,000
Chemong Lake	1,000,000
Connolly's Lake	500,000
Deer Bay	500,000
Deer Lake	2,000,000
Deer River	2,300,000
Indian River	1,500,000
Little Cedar Lake	500,000
Little Lake	200,000
Long Lake	1,000,000
Loon Lake	1,500,000
Lovesick Lake	500,000
North River	1,000,000
Oak Lake	1,500,000
Otonabee River	3,000,000
Pigeon Lake	1,000,000
Round Lake	1,500,000
Trent River	400,000
Twin Lakes	150,000

Prince Edward:

Bay of Quinte	6,150,000
Consecon Lake	900,000
Smith's Bay	1,250,000
West Lake	300,000

Rainy River:

Clearwater Lake	3,000,000
Lake of the Woods	24,000,000
One-sided Lake	3,000,000

Pine Lake	1,500,000
Rainy Lake	8,000,000
Sabaskong Bay	12,000,000
Steepprock Lake	6,000,000

Renfrew:

Black's Bay	500,000
Calabogie Lake	500,000
Coulas Lake	225,000
Cushene Lake	125,000
Golden Lake	625,000
Hazel Bay	250,000
Hond's Lake	125,000
Madawaska River	125,000
Meilleur's Bay	250,000
Muskkrat Lake	500,000
Norway Lake	125,000
Petawawa River	250,000
Sturgeon Lake	250,000
T. Lake	250,000
White Lake	500,000

Simcoe:

Black Lake	250,000
Gloucester Pool	1,250,000
Little Lake	250,000
Nottawasaga River	100,000
Severn River	675,000
Six Mile Lake	500,000

Stormont:

St. Lawrence River	1,850,000
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Sudbury:

Agnew Lake	750,000
Bisco Lake	500,000
Charlton Lake	400,000
Cranberry Lake	300,000
Crooked Lake	250,000
Cross Lake	250,000
French River	2,300,000
Frood Lake	250,000
Hanna Lake	250,000
La Cloche Lake	200,000
Long Lake	700,000
Makido Lake	500,000
Maple Lake	250,000
Middle Lake	250,000
Minisinakwa Lake	500,000
Moose Lake	200,000
Murray Lake	300,000
Nepiwasay Lake	150,000
Onaping Lake	1,000,000
Pashy Lake	500,000
Penage Lake	1,750,000
Peterson's Bay	750,000
Ramsay Lake	1,000,000
Silver Lake	300,000
Slaterock Lake	500,000
Spanish River	750,000
Trout Lake (Cherriman) ..	250,000
Trout Lake (Tilton)	250,000
Upper Sturgeon	200,000
Wanapitei Lake	1,000,000
Whitson Lake	250,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

PICKEREL—Continued

Timiskaming:	
Gillies Lake	140,000
Giroux Lake	30,000
Granite Lake	50,000
Kenogami Lake	200,000
Lady Evelyn Lake	70,000
Long Lake	80,000
Montreal River	80,000
Mortimer Lake	70,000
Net Lake	50,000
Obuskong Lake	140,000
Reid Lake	70,000
Rib Lake	170,000
Round Chute	30,000
Round Lake	80,000
Petersen Lake	80,000
Sesekinika Lake	250,000
Sharpe Lake	70,000
Timiskaming Lake	640,000
Twin Lakes	60,000
Victoria Lake	80,000
Wendigo Lake	100,000
Wilson Lake	70,000

Victoria:

Burnt River	150,000
Dalrymple Lake	250,000
Head Lake	250,000
Little Turtle Lake	500,000
Mud Turtle Lake	250,000

Great Lakes:

North Channel	7,300,000
Georgian Bay	425,000
Lake Huron	41,450,000
Lake Superior	1,500,000

BROWN TROUT**FINGERLINGS****Grey:**

Feeders Saugeen River	19,954
Feeders Styx River	10,000

YEARLINGS**Brant:**

Branch Creek	5,700
Whiteman's Creek	9,600

Bruce:

Austin Fladd Mill Dam	1,800
Crane River	3,900
Lockerby Creek	7,600
Plum Creek	5,400
Saugeen River	10,800
Snake Creek	5,700
Sucker Creek	1,900
Teeswater River	3,600
Vogt's Creek	2,700
Willow Creek	1,800

Durham:

Baldwin's Creek	1,260
Bowmanville Pond	2,400
Laing's Stream	800
Stephen's Creek	2,400

Elgin:

Big Creek	3,000
Big Otter	3,600

Grey:

Big Head River	14,400
Lueck's Mill Pond	8,400
Potawatami River	3,600
Saugeen River	11,700
Styx River	8,100
Sydenham River	8,100
Weatherspoon Creek	1,000

Haldimand:

Rogers Creek	1,000
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Halton:

Sixteen Mile Creek	10,800
Twelve Mile Creek	10,800

Hastings:

Beaver Creek	3,200
Black Creek	3,200
Little Mississippi River	3,200
Rawdon Creek	3,400
Squire's Creek	3,200

Huron:

Maitland River	9,000
Nine Mile River	3,600

Lambton:

Bear Creek	2,000
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Lincoln:

Effingham Stream	1,000
Twelve Mile Creek	225

Middlesex:

Medway Creek	7,210
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Norfolk:

Big Creek	9,900
Little Otter Creek	10,800
Nanticoke Creek	8,150

Northumberland:

Bowen's Pond	1,900
Cole's Pond	1,500
Dudley's Pond	1,900

Ontario:

Chubtown Creek	3,000
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Oxford:

Burns Creek	1,800
Horner's Creek	3,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

BROWN TROUT—Continued

Peel:	
Credit River	3,100
Perth:	
Avon River	5,000
Halfway House Creek	700
Peterborough:	
Baxter Creek	6,000
Cavan Creek	3,000
Deer Bay Creek	9,000
Eel's Creek	9,600
Jack's Creek	9,600
Mississauga Creek	6,000
Mississauga River	6,400
Mount Pleasant Creek	2,000
North River	6,400
Otter Creek	1,400
Simcoe:	
Boyne River	2,100
Nottawasaga River	21,600
Willow Creek	13,350
Waterloo:	
Bridgeport Dam	1,800
Dentinger Creek	3,000
Fisher Mill Dam	1,800
Welland:	
Lyon's Creek	6,000
Wellington:	
Guelph Waterworks Stream	75
Speed River	10,800
Wentworth:	
Spencer Creek	2,100
York:	
Hoover's Pond	200
Humber River	10,900
Miscellaneous:	
Private waters (Experimental)	100

Camp Lake	15,000
Crotch Lake	35,000
Crow Lake	20,000
Desert Lake	10,000
Devil Lake	20,000
Dog Lake	20,000
Draper Lake	15,000
Eagle Lake	60,000
Fortune Lake	30,000
Grindstone Lake	30,000
Kashwakamak Lake	40,000
Little Rock Lake	15,000
Little Salmon Lake	15,000
Loughborough Lake	40,000
Lucky Lake	15,000
Mackie Lake	15,000
Mississagon Lake	25,000
Palmerston Lake	25,000
Reid's Lake	15,000
Rock Lake	15,000
Round Schooner Lake	15,000
Sharbot Lake	30,000
West Rideau Lake	30,000

Hastings:	
Baptiste Lake	90,000
Bass Lake	10,000
Big Salmon Lake	30,000
Burnt Lake	10,000
Cedar Lake	30,000
Clear Lake	10,000
Crooked Lake	20,000
Devil Lake	10,000
Dickie Lake	20,000
Eagle Lake	25,000
Gunter Lake	10,000
Jamieson Lake	10,000
Lake St. Peter	30,000
La Valley Lake	10,000
Limestone Lake	5,000
Little Salmon Lake	10,000
Little Salmon River	5,000
Long Lake	5,000
O'Grady Lake	10,000
Papineau Lake	20,000
Peets Lake	10,000
Robinson Lake	15,000
Trout Lake (Faraday)	10,000
Trout Lake (Lake)	25,000
Wadsworth Lake	10,000
Weslemkoon Lake	30,000

LAKE TROUT**EYED EGGS**

Exchange 1,845,850

FRY

Frontenac:	
Big Gull Lake	60,000
Blue Lake	10,000
Brule Lake	20,000
Buck Lake (Barrie)	25,000
Buck Lake (Bedford)	10,000
Buckshot Lake	30,000

Lanark:

Big Rideau Lake	100,000
Silver Lake	10,000

Leeds:

Charleston Lake	50,000
Indian Lake	30,000
Otter Lake	10,000
Red Horse Lake	10,000

Lennox-Addington:

Elbow Lake	15,000
Finch Lake	20,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

LAKE TROUT—Continued

FRY

Lennox-Addington—Continued

Little Cedar Lake	10,000
Little Weslemkoon Lake	10,000
Loon Lake	50,000
Otter Lake	30,000
Simpson Lake	5,000
Spoon Lake	10,000
Thirty Island Lake	20,000
White Lake	20,000

Peterborough:

Big Cedar Lake	10,000
Bottle Lake	10,000
Eagle Lake	30,000
Eel's Lake	30,000
Jack's Lake	30,000
Lake Catchacoma	20,000
Little Cedar Lake	10,000
Long Lake	10,000
Loon Lake	90,000
Mississauga Lake	20,000
Oak Lake	15,000
Trout Lake	30,000
Twin Lake	15,000

Rainy River:

Ash Bay	24,900
Bad Vermilion Lake	80,000
Burnt Lake	20,000
Kakagi Lake	135,000
Lake Kishkutena	45,000
Narrow Lake	20,000
Pipestone Lake	20,000
Steeprock Lake	60,000

Great Lakes:

North Channel	140,000
Georgian Bay	1,750,000
Lake Huron	2,480,000
Lake Ontario	567,000

FINGERLINGS

Algoma:

Achigan Lake	10,000
Axe Lake	15,000
Bass Lake	10,000
Basswood Lake	15,000
Caribou Lake	7,000
Chiblow Lake	5,000
Chub Lake	20,000
Cummings Lake	15,000
Denman Lake	7,000
Fleck Lake	7,000
Garden Lake	10,000
Grey Trout Lake	6,000
Hawk Lake	10,000
Hobon Lake	10,000
Howard Lake	5,000
Island Lake	5,000
Johammeghia Lake	15,000
Lake Lauzon	6,000

Lake of the Mountains	4,000
Long Lake	15,000
Madawonsing Lake	5,000
Matinenda Lake	5,000
Mountain Lake	6,000
Patton Lake	10,000
Penage Lake	15,000
Pickernel Lake	5,000
Rand Lake	10,000
Ranger Lake	10,000
Raw Hide Lake	6,000
Red Deer Lake	6,000
Robertson Lake	15,000
Rose Marie Lake	6,000
Sand Lake	10,000
Spruce Lake	10,000
Trout Lake	10,000
Wakomata Lake	15,000
Windermere Lake	7,000

Bruce:

Gillies Lake	25,000
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Cochrane:

Remi Lake	6,000
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Haliburton:

Bear Lake	5,000
Big Bear Lake	3,000
Big Bob Lake	5,000
Boskung Lake	10,000
Clear Lake	4,000
Clearwater Lake	5,000
Davis Lake	9,000
Drag Lake	15,000
Eagle Lake	5,000
East Lake	5,000
Fishtail Lake	4,000
Gull Lake	10,000
Gun Lake	5,000
Hollow Lake	5,000
Horseshoe Lake	3,000
Hurricane Lake	5,000
Kashagawigamog	10,000
Kennisis Lake	10,000
Kimball Lake	5,000
Kushog Lake	10,000
Little Hawk Lake	5,000
Maple Lake	5,000
Moose Lake	5,000
Mountain Lake	5,000
Oblong Lake	5,000
Oxtongue Lake	5,000
Paudash Lake	3,000
Pine Lake	3,000
Redstone Lake	10,000
South Lake	5,000
Spruce Lake	5,000
Stormy Lake	3,000
St. Nora's Lake	5,000
Trout Lake	8,000
Twelve Mile Lake	10,000
White Trout Lake	5,000
Wolfe Lake	3,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

LAKE TROUT—Continued			
Kenora:			
Blue Lake	12,500	Tomiko Lake	8,000
Cliff Lake	25,000	Trout Lake	12,000
Cobble Lake	50,000	Wasaksina Lake	3,000
Cul-de-Sac Lake	105,000	Wickstead Lake	6,000
Dogtooth Lake	50,000		
Eagle Lake	14,700	Parry Sound:	
Gee Jay Lake	25,000	Bay Lake	10,000
Rosamond Lake	20,000	Black Lake	2,500
Sturgeon Lake	50,000	Caribou Lake	5,000
Thunder Lake	20,000	Clear Lake	10,000
Trout Lake	25,000	Eagle Lake	15,000
Whitefish Bay	75,000	High Lake	7,500
		Horn Lake	15,000
		Lake Joseph	5,000
		Lake Rosseau	15,000
		Little Lake Joseph	10,000
Manitoulin:		Little Whitefish Lake	5,000
Lake Manitou	20,000	Loon Bay	20,000
		Loon Lake	5,000
Muskoka:		Lorimer Lake	15,000
Bala Bay	15,000	Memesagamesi Lake	20,000
Bella Lake	10,000	Otter Lake	10,000
Big Twin Lake	2,500	Portage Lake	5,000
Bruce's Lake	5,000	Round Lake	5,000
Clear Lake (McLean)	10,000	Ruth Lake	10,000
Clear Lake (Ridout)	10,000	Salmon Lake	10,000
Fairy Lake	15,000	Sand Lake	10,000
Haley's Lake	10,000	Sucker Lake	15,000
Lake of Bays	50,000	Tea Lake	5,000
Lake Joseph	10,000	Three Legged Lake	10,000
Little Clear Lake	2,500	Three Mile Lake	5,000
Long Lake	10,000	Trout Lake (Hagerman)	5,000
Loon Lake	5,000	Trout Lake (McDougall)	10,000
Mary Lake	30,000	Whitefish Lake	10,000
Muskoka Lake	40,000		
Near Cut Lake	5,000	Peterborough:	
Paint Lake	7,500	Crystal Lake	8,000
Peninsula Lake	15,000	Lake Talon	3,000
Pine Lake	15,000		
Rebecca Lake	12,500	Renfrew:	
Rosseau Lake	10,000	Bark Lake	8,000
Six Mile Lake	5,000	Barry's Bay	8,000
Skeleton Lake	40,000	Birchim Lake	5,000
Solitaire Lake	5,000	Blackfish Bay	8,000
Tasso Lake	5,000	Centers Lake	6,000
Vernon Lake	20,000	Clear Lake	15,000
		Cross Lake	8,000
Nipissing:		Diamond Lake	4,000
Aylen Lake	3,000	Kaministeg Lake	7,000
Bear Lake	6,000	Long Lake (Radcliffe)	7,000
Cache Lake	3,000	Long Lake (Wylie)	6,000
Cameron Lake	8,000	Pog Lake	8,000
Cedar Lake	10,000	Round Lake (Lyell)	7,000
Diamond Lake	3,000	Round Lake (Richards)	14,000
Dotty Lake	5,000	Tea Lake	6,000
Fatty Lake	5,000	Trout Lake	10,000
Gull Lake	3,000	Upper Carson Lake	10,000
Little Martin Lake	6,000	Wadsworth Lake	7,000
Martin Lake	6,000		
Moore's Lake	3,000	Simcoe:	
Smoke Lake	3,000	Kempfenfeldt Bay	30,000
Source Lake	3,000		
South Tea Lake	3,000	Sudbury:	
Talon Lake	8,000	Agnew Lake	10,000
Timagami Lake	3,000	Clearwater Lake	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1939, to March 31st, 1940—Continued

LAKE TROUT—Continued**Sudbury—Continued**

Emerald Lake	14,000
Fairbanks Lake	8,000
Kuba Lake	8,000
Lang Lake	7,000
Little Penage Lake	8,000
Long Lake (Broder)	10,000
Long Lake (Harrow)	5,000
Mesomikenda Lake	8,000
Millard Lake	12,000
Miller Lake	5,000
Ministic Lake	7,000
Nepahwin Lake	10,000
Onaping Lake	14,000
Ramsay Lake	10,000
Trout Lake	10,000
Wanapitei Lake	15,000
West Bay	7,000
Windy Lake	14,000

Thunder Bay:

Windigoostigwan Lake	40,000
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Timiskaming:

Anima Nipissing Lake	8,000
Crystal Lake	6,000
Gowganda Lake	3,000
Herridge Lake	5,000
Justine Lake	3,000
Larder Lake	6,000
Long Lake	5,000
Nellie Lake	6,000
Net Lake	3,000
Perry Lake	9,000
Pike Lake	3,000
Pine Lake	3,000
Rib Lake	3,000
Trout Lake	3,000
Twin Lake	3,000
Watabeag Lake	10,000
Wendigo Lake	3,000

York:

Lake Simcoe	30,000
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Great Lakes:

Lake Superior	2,460,000
North Channel	74,000
Georgian Bay	1,769,000
Lake Huron	3,293,200

**RAINBOW TROUT
FINGERINGS**

Algoma:

Batchawana River	7,585
Chippewa River	7,000
Hamburg Creek	5,000
Huston Lake	5,000
Jobammeghia Lake	10,000
Keegos Lake	5,000
Loon Lake	10,000

Mississagi River	10,000
Montreal River	10,000
North Lake	5,000
West Lake	5,000
White River	10,000

Sudbury:

Onaping River	15,000
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Timiskaming:

Choppin Lake	5,000
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Miscellaneous:

Sale	50
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YEARLINGS and ADULTS**Bruce:**

Saugeen River	1,800
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Dufferin:

Nottawasaga River	6,085
Pine River	1,500

Elgin:

St. Thomas Reservoir	850
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Grey:

Sydenham River	500
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Norfolk:

Big Creek	350
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Simcoe:

Kempfenfeldt Bay	1,500
Lake Simcoe	1,500
Sturgeon River	5,000

Wellington:

Saugeen River	1,500
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York:

Humber River	1,500
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Miscellaneous:

Sales—Demonstration and propagation purposes	2,069
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**KAMLOOPS TROUT
FINGERLINGS**

Algoma:

Blue Lake	19,000
Devils Lake	18,000
Lake Constance	20,000
Trout Lake	20,000

Muskoka:

Echo Lake	10,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

KAMLOOPS TROUT—Continued

Nipissing:	
Lake Timagami	8,000
Parry Sound:	
Lake Bernard	10,000
Miscellaneous:	
Demonstration purposes	41

SPECKLED TROUT**FINGERLINGS**

Durham:	
Squirrel Creek	4,000
Taylor's Creek	4,000
Frontenac:	
Black Creek	10,000
Bolton Creek	15,000
McCausland Creek	10,000
Sharbot Lake Creek	15,000
Hastings:	
Baptiste Lake	28,000
Bartlett Creek	5,000
Bentley Creek	5,000
Diamond Lake	8,000
T. Lake	5,000
Lennox-Addington:	
Mill Stream	10,000
Simpson Lake	10,000
Spoon Lake	10,000
Spring Lake	5,000
White Lake	15,000
Nipissing:	
Duschene Creek	15,000
Four Mile Creek	25,000
Rainey Lake	8,000
Spring Lake	25,000
Twenty Minute Lake	25,000
Wolf Lake	25,000
Northumberland:	
Burnley Creek	10,000
Chidley Creek	3,000
Dartford Creek	3,000
DeLong's Creek	3,000
Duncan Creek	4,000
Pegman's Creek	3,000
Quinn's Creek	3,000
Robin's Creek	3,000
Sandy Flat Creek	4,000
Valleau's Creek	10,000
Peterborough:	
Carver's Creek	8,000
Miscellaneous:	
Sales—Demonstration and propagation purposes	1,000

YEARLINGS**Algoma:**

Achigan Creek	2,500
Achigan Lake	3,200
Agawa River	9,600
Alona Bay Creek	1,500
Alva Lake	1,600
Anjigami Creek	1,600
Arnett Lake	1,600
Aubinadong Bay	2,400
Aubinadong Lake	2,400
Austin Lake	1,500
Basswood Lake	2,000
Batchawana River	9,600
Beaver Lake	1,600
Big Lake	2,000
Black Creek	1,000
Boat Lake	1,000
Boundary Lake	2,400
Boyd's Creek	3,200
Buckboard Lake	1,000
Burns Lake	2,500
Burrows Lake	3,200
Caldwell's Lake	800
Cameron Creek	1,000
Camp 8 Bay	2,400
Canoe Lake	500
Carpenter Lake	3,200
Cedar Creek	800
Chippewa River	27,200
Chub Lake	5,200
Clear Lake (Mack)	1,000
Clear Lake (Vankoughnet) ..	3,200
Coffee Creek	2,500
Copp Lake	5,200
Cram Lake	500
Crystal Creek	1,500
Crystal Lake	2,000
Cummings Lake	1,200
Deer Lake	2,500
Diamond Lake	2,000
Driving Creek	5,000
Driving Lake	1,000
Echo Lake	1,500
Eleven Mile Creek	3,200
Elizabeth Lake	1,000
Fairbank Creek	10,000
Fern Lake	1,600
Fish Lake	1,600
Foot Lake	2,500
Garden Lake	4,800
Garden River	1,000
Gilmore Lake	750
Goodwins Lake	1,500
Goulais River	5,250
Gravel Lake	3,500
Harmony Creek	5,100
Harmony River	3,000
Hawk Lake	1,600
Heart Lake	6,700
Herman Lake	3,200
Heyden Lake	5,100
Hidden Portage Lake	2,400
High Lake	1,000
Hills Creek	1,500
Hoath Lake	1,600

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Algoma—Continued**

Hobon Lake	3,200	Pinkney Lake	1,600
Horn Lake	1,600	Rainbow Lake	2,000
Horse Lake	1,250	Rand Lake	1,600
Horseshoe Lake	1,500	Ranger Lake	1,000
Hubert Lake	2,400	Red Deer Lake	800
Island Lake (Aberdeen)	2,500	Red Rock Lake	1,000
Island Lake (Aweres)	3,000	Richardson Lake	2,400
Island Lake (176)	5,700	Robertson Lake	4,700
Jackfish River	3,000	Rock Lake	800
Jimmy Lake	800	Root River	6,600
Jobammeghia Lake	1,600	Round Lake (1A.)	800
Kaskawong River	2,400	Round Lake (Grassett)	3,200
Kelly Lake	1,000	St. Joseph Island Streams ..	3,000
Kendogami River	3,200	Sand Lake	3,200
Lake One	1,000	Sand River	2,400
Laughing Lake Bay	2,400	Saymo Bay	2,400
Lessley Lake	1,500	Saymo River	2,400
Little High Lake	1,000	Sesabic Lake	3,500
Little White River	2,400	Sharp Sand River	1,500
Lonely Lake	3,000	Shumka Lake	2,500
Long Lake (Meredith)	1,500	Silver Creek	3,000
Long Lake (Whitman)	1,000	Silver Lake	1,000
Loon Lake (Deroche)	2,500	Sister Lake No. 1	800
Loon Lake (24-R-13)	4,700	Sister Lake No. 2	1,600
Loonskin Lake	3,200	Snowshoe Creek	2,200
Lower Island Lake	2,000	Speckled Trout Lake (1A.) ..	2,400
Lower Pine Lake	1,600	Speckled Trout Lake (28-R-16)	1,600
Lower Twin Lake	1,600	Speckled Trout Pond (176) .	1,000
Mader Lake	1,600	Spring Creek	2,000
Mamainse Harbor	1,000	Spruce Lake	2,400
Mary Ann Lake	1,000	Storehouse Creek	2,000
Mashagama Lake	5,400	Sucker Lake	1,600
Merchant Lake	3,000	Summitt Lake	4,850
Mica Bay Creek	750	Tamarack Lake	800
Mile 58 Lake	1,600	Tawabinasay Lake	3,200
Mill Creek	1,600	Tea Lake	1,800
Minnow Lake	3,000	Thessalon River	4,200
Maude Lake	750	Triple Lake	1,600
Maunshe Megoose Lake	1,600	Trout Creek	1,000
McCauley Lake	1,200	Trout Lake (Aweres)	2,000
McCormick Lake	1,600	Trout Lake (Montgomery) ..	1,500
McCrea Lake	2,400	Trout Lake (62)	3,000
McDonald Stream	1,000	Trout Lake (25-R-14)	3,800
McLeod Creek	1,250	Trout Lake Creek	1,000
McVeigh Creek	1,600	Trout Lake Inlet	2,350
Michipicoten River	8,000	Two Tree River	4,400
Mongoose Lake	3,200	Unnamed Lake (Larkin) ...	1,000
Moose Lake (25-R-13)	3,200	Upper Pine Lake	1,600
Moose Lake (Wells)	1,600	Upper Twin Lake	2,000
Mountain Lake (1A.)	3,200	Victoria Creek	3,000
Mountain Lake (Gould)	1,600	Vixon Lake	3,200
Mountain Lake (McMahon) ..	1,600	Wallace Lake	800
Mud Creek (Vankoughnet) ..	2,500	Wartz Lake	2,400
Mud Lake (1A.)	1,300	Wawa Lake	5,200
Murphy Creek	1,100	Weashog Lake	526
Odowbi Lake	800	White River	4,400
Ozone Creek	3,000	Williams Creek	1,500
Pancake River	3,800	Wonashin Lake	1,600
Paquette Lake	5,600	Woods Creek	2,400
Peter Lake	1,500		
Pike Lake	1,200	Brant:	
Pine Lake (1A.)	1,600	St. George Lake	500
Pine Lake (25-R-11)	1,600		
		Bruce:	
		Barrow Bay Creek	3,300
		Formosa Creek	100
		Nine Mile Creek	1,600

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Bruce—Continued.**

Silver Stream (Amabel)	3,600
Silver Stream (Carrick)	1,400
Spring Creek	3,600
Vance's Creek	200
Willow Creek	750

Cochrane:

Big Gully Creek	1,000
Elsie Lake	1,000
Grassy River	1,000
Junction Lake	900
Legare Lake	1,200
MacDonald Lake	900
Paradise Creek	1,000
Red Stone River	2,600
Red Sucker River	2,600
Round Lake	1,200
Rushton Lake	1,000
Thunder Creek	900
Unnamed Lake (Bristol Tp.)	900
Unnamed Lake (Deloro Tp.)	2,700
Unnamed Lake (German Tp.)	800
Unnamed Lake (Macklem Tp.)	2,100
Unnamed Lake (Tisdale Tp.)	1,700

Dufferin:

Cemetery Creek	2,700
Credit River	8,300
McKittrick Stream	1,800
Mulmur Lake	1,400
Nottawasaga River	7,200
Pine River	3,750

Durham:

Ard's Creek	100
Ball's Creek	100
Beatty's Creek	200
Carveth Creek	100
Charlie Awde Stream	100
Cowan Stream	700
Dawson's Creek	500
DeLong Creek	900
Dyer's Creek	1,100
Frew's Creek	200
Goodman's Pond	200
Hall's Stream	200
Harris Creek	300
Laing's Stream	100
Luxton's Creek	1,000
Mercer's Creek	200
Millson Creek	100
Muldrew Creek	200
Powell's Creek	200
Sowden Stream	200
Unnamed Creek	400

Frontenac:

Camp Lake	2,400
Crotch Lake	1,500
Gibson Lake	4,800
Grindstone Lake	4,800
Lucky Lake	2,400

Mackie Lake	2,000
Mallory Creek	4,800
Quackenbush Lake	2,000
Reid's Lake	2,400
Rock Lake	2,400
Round Schooner Lake	1,000
Schooner Lake	1,800
Spring Creek	1,000

Grey:

Bass Lake	3,000
Beatty Saugeen River	4,300
Beaver River	4,600
Bells Creek	600
Big Head River	3,600
Black's Beach	3,600
Black Creek	1,000
Boyd's Lake	5,400
Boyne River	4,100
Caseman's Creek	200
Christie Lake	2,550
Cotter's Creek	300
Craigs Creek	300
Cullen Lake	100
Deer Creek	1,800
Ewart Lake	6,600
Ferguson Creek	950
Firths Creek	1,800
Glen Creek	1,800
Hayward Falls	1,200
Hydro Pond	7,200
Lamont's Creek	100
Lawrence Creek	950
Manx Creek	1,800
Mary Lake	200
McCaslin Creek	200
McConnell Creek	1,000
McGowans Dam	1,800
McIntosh Lake	1,000
McLean's Creek	200
McMullen's Creek	950
Munshaw Lake	500
Oxenden Creek	3,300
Paddy's Creek	3,600
Rocky Saugeen	4,800
Saugeen River	18,850
Spey River	2,500
Spring Creek	650
Stream at Markdale	1,000
Styx River	650
Sydenham River	11,800
Tannery Creek	650
Walker Creek	300
Williams Lake	3,000
Youngs Lake	1,500

Haliburton:

Bear Creek	500
Bitter Lake	1,200
Clear Lake	2,400
Cranberry Lake	1,000
Davis Lake	400
Fletcher Lake	1,000
Gull River	1,000
Gun Lake	4,800

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Haliburton—Continued.**

Harvey Lake	350
Hawke River	500
Hollow Lake	4,800
McCue Creek	1,500
Oxtongue Lake	1,500
Partridge Lake	500
Pen Lake	1,500
Raven Lake	2,750
Round Lake	350
Scotch Line Creek	500
Stormy Creek	500
Sunken Lake	500
Welcome Lake	1,500

Hastings:

Alexander Creek	1,500
Banker Lake	3,600
Bob Whyte Lake	800
Brett Lake	2,400
Buck Lake	2,400
Cannon's Lake	1,200
Canoe Lake	2,400
Cockburn Lake	2,400
Deer River	9,600
Devil Lake	2,400
Diamond Lake	4,800
Echo Lake	3,000
Egan Creek	14,400
Faulkner's Creek	1,500
Fraser Creek	4,800
Fraser Lake	2,400
Geens Creek	2,400
Green Lake (Bangor)	3,000
Green Lake (Cashel)	2,400
Hineses Lake	1,600
Jardison Lake	1,200
Little Lighthouse Lake	1,200
Little Mississippi Lake	4,800
Long Lake (Herschel)	1,200
Long Lake (Mayo)	2,000
MacKenzie Lake	2,400
Mill Creek	4,200
Mud Lake	1,200
Mud Turtle Lake	2,400
Oak Lake	3,000
Papineau Creek	4,800
Potter Lake	2,400
Rawdon Creek	7,200
Shire Creek	4,800
Smiths Lake	5,400
Squires Creek	9,600
Stoney Lake	2,400
Thirty Island Creek	2,400

Huron:

Belgrave Creek	300
Foster Creek	500
Glaziers Creek	300
Maitland River	2,400
St. Helen's Creek	500
Spring Creek	300

Kenora:

Elbow Lake	2,500
Little Vermilion Lake and Streams	7,800
Silver Lake	2,500

Lanark:

Craigs Creek	1,500
Paul's Creek	3,600
Long Sue Creek	1,200

Lennox-Addington:

Beaver Creek	4,800
Brown's Lake	3,200
Burns Lake	3,200
Conner's Lake	2,400
Copeland Lake	2,400
Dafoe Lake	2,400
Douglas Lake	1,600
East Lake	1,600
Green Lake	4,800
Kilborn Lake	1,000
Long Lake	2,400
Loon Lake	1,000
Rattan Lake	4,800
Rock Lake	2,400
Shiner Creek	2,400
Snake Creek	4,800
White Lake	9,600

Lincoln:

St. Davids Spring Creek	2,000
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Manitoulin:

Badger Creek	3,500
Barr's Creek	6,600
Bluejay Creek	30,000
Bonnie Doone Creek	1,600
Hare's Creek	2,600
Manitou River	25,000
Mindemoya River	30,000
Nortons Creek	2,000
Silver Creek	1,600
Srigley Creek	5,200
Spring Creek	6,000

Middlesex:

Fanshaw Creek	2,150
Wye Creek	3,000

Muskoka:

Atkinson Lake	800
Axles Lake	2,400
Beaver Creek	6,000
Bella Lake	6,000
Bells Lake	2,000
Big East River	24,000
Big Turtle Lake	1,600
Big Wind Lake	1,600
Bird Lake	1,600
Black Creek	6,000
Black River	3,200
Bradford Creek	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued

Muskoka—Continued

Buck Lake	3,200
Clear Lake (McLean)	1,600
Clear Lake (Oakley)	3,000
Clear Lake (Ridout)	5,000
Clear Lake (Sinclair)	3,000
Coopers Lake	4,000
Deep Lake	3,200
Dog Lake	3,000
East River	3,000
Eastall Lake	2,000
Echo Lake	11,000
Fairy Lake Creeks	6,000
Fox Lake	6,000
Fraser Lake	1,000
Gibbs Lake	4,000
Goose Lake	6,000
Grants Lake	3,200
Grindstone Lake	1,600
Gull Lake	3,200
Hecks Lake	4,000
Helve Lake	2,000
High Lake	2,000
Jessops Creek	3,000
Lake of Bays	19,200
Limpers Lake	1,600
Little East River	12,000
Little Turtle Lake	1,600
Little Vernon Lake	1,000
Long Lake	3,200
Loon Lake	1,000
Loon Lake Creek	2,000
Mary Lake	6,000
Muskoka River	49,200
Peninsula Lake	12,000
Rebecca Lake	6,000
Red Chalk Lake	5,000
Round Lake	6,000
Shoe Lake	1,500
Skeleton River	5,500
Solitaire Lake	6,000
Sparks Lake	1,000
Split Rock Lake	2,000
Trout Lake	600
Upper Shewfelt Lake	800
Vernon Lake Creek	6,000
Waseosa Lake	6,000
White Lake	3,200
Wolf Lake	1,500

Nipissing:

Acanthus Lake	250
Antoine Creek	3,400
Bakers Creek	1,500
Balsam Creek	3,400
Bastien Creek	1,500
Billy Lake	1,000
Billy Neil Creek	1,500
Blue Lake	250
Burnt Creek	2,000
Burnt Island Lake	3,000
Burrett's Creek	3,000
Cache Lake	2,500

Callahan Lake	1,500
Canisbay Lake	1,000
Canoe Lake	2,500
Cauchon Lake	250
Cedar Lake	250
Chippewa Creek	3,400
Clark Lake	500
Clear Lake (Chambers)	800
Clear Lake (Field)	3,000
Clear Lake (Lyell)	500
Clear Lake (Notman)	1,000
Cold Stream	500
Coon Lake	1,000
Crane Lake	1,000
Crooked Lake	200
Cutler Lake	1,600
Devils Lake	800
Dorans Creek	4,000
Emerald Lake	2,500
Finlayson Lake	1,500
Found Lake	1,000
Four Mile Creek	8,000
Gauthier Lake	250
Gauthier Pond	750
Gilmour Lake	250
Gorman Creek	1,500
Grand Lake	250
Green Lake	500
Guppy Lake	800
Henderson Lake	1,500
Heron Lake	500
Hot Lake	1,000
Jocko River	12,800
Jubilee Lake	1,000
Kioshqua Lake	250
Lake St. Andrew	250
Lake of Two Rivers	2,000
Little Island Lake	1,000
Little Jocko River	6,400
Loon Lake	800
Lost Lake	1,000
McDonald Lake	1,500
McGee Creek	1,500
Mew Lake	500
Moores Lake	2,000
North River	13,350
Opeongo River	250
Opinicon Creek	2,800
Park Lake	1,000
Radiant Lake	250
Red Rock Lake	250
Robitaille Lake	500
Rock Lake	500
Smoke Lake	2,000
Smoky Creek	3,750
Source Lake	1,500
South Tea Lake	1,000
Spawning Lake	800
Speckled Trout Lake	500
Spring Lake (McLaren)	3,400
Spring Lake (Sisk)	1,500
Stony Creek (Lyman)	1,000
Stony Creek (Notman)	500
Sturgeon Lake	3,400
Tanamakoon Lake	2,000
Timagami Lake	2,800

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Nipissing—Continued.**

Trout Lake	800
Trout Lake (Parkman)	1,000
Twenty Minute Lake	1,600
Webb Lake	1,800
Whitefish Lake	3,000
White Partridge Lake	250
Whitney Lake	2,600
Wolf Lake	8,000

Norfolk:

Almond Creek	500
Bassels Creek	500
Big Creek	1,540
Campbell Creek	500
Eckardt Creek	500
Howey Creek	500
Kent Creek	2,000
Nanticoke Creek	3,000
Patterson Creek	1,000
Ryerse Creek	1,000
Synden Creek	500
Venison Creek	3,000
Wolfe Creek	500

Northumberland:

Baltimore Creek	2,800
Big Creek	4,000
Burnley Creek	4,800
Chidleys Creek	100
Dartford Creek	2,400
Dawson Creek	1,500
DeLong's Creek	1,600
Duncan's Creek	800
Little Cole Creek	4,000
Little Lake	3,600
Mill Creek	200
O'Grady's Creek	2,700
Pegman's Creek	1,600
Quinn's Creek	800
Robins Creek	200
Sandy Flat Creek	1,600
Valleau's Creek	800

Ontario:

Beaver River	2,400
Cameron Creek	1,000
Elgin Park Pond	1,000

Parry Sound:

Bar Lake Creek	500
Barrett's Creek	1,200
Barton Creek	1,500
Beaver Lake	1,200
Big Clam Lake	800
Big Mink Lake	3,200
Black Creek (Gurd)	1,500
Black Creek (Strong)	2,200
Bradford Creek	600
Buck Lake	500
Burley's Creek	500
Cheer Lake	500
Clear Lake (Armour)	1,000
Clear Lake (Laurier)	2,500

Clear Lake

(South Himsworth)	500
Clear Lake (Wilson)	700
Commanda Lake	1,600
Crooked Lake	4,200
Cummings Lake	600
Deer Creek	700
Deer Lake	700
Deer River	1,700
Distress River	2,800
Dunkers Creek	1,000
Eagle Lake	1,000
Fagans Creek	600
Fleming Lake	1,300
Franks Lake	1,000
Genesee Creek	1,200
Gorge Lake	750
Gull Lake	500
Haggerty Creek	500
Hog Lake	800
Horn Lake	1,800
Hughes Lake	2,250
Hungry Lake Creek	750
Island Lake	600
Jacks Lake Creek	400
James Creek	900
Jordons Creek	600
Lemmons Creek	100
Little Mink Lake	2,250
Lynn Lake	800
Madill Creek	500
Magnetawan River	11,500
McCullough Creek	2,400
Otter Lake	1,300
Owl Lake	600
Paisley Creek	1,300
Pool Lake	900
Proudfoot Creek	500
Ragged Creek	900
Rainy Lake	3,000
Rat Lake	1,700
Round Lake	1,750
Roussel's Creek	500
Sand Lake	3,400
Smiths Creek	1,300
South River	2,400
Spring Creek (Chapman) ..	1,500
Spring Creek (Lount)	6,500
Steels Creek	1,500
Stellars Creek	600
Stoney Lake	2,800
Stream in Ryerson Township	1,700
Surprise Creek	750
Tea Lake	1,000
Three Mile Creek	1,400
Trout Creek (Himsworth) ..	3,400
Trout Creek (Laurier)	2,700

Peel:

Credit River	5,200
Humber River	2,100

Peterborough:

Big Ouse River	4,800
Carvers Creek	1,500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Peterborough—Continued**

Cavan Stream	6,800
Eel's Creek	3,200
Little Ouse River	4,800
Mount Pleasant Stream	3,200
Otter Creek	2,600
Plateau Creek	2,600
Sophies Lake	1,600
Union Creek	4,800

Renfrew:

Barbout Creek	2,000
Battery Creek	500
Bear Lake	1,500
Biggs Creek	2,000
Big Round Lake	2,000
Bissett Creek	3,250
Blueberry Lake	2,000
Brennan's Creek	1,500
Byers Creek	2,500
Caldwell Creek	1,000
Centers Lake	4,000
Clarkes Creek	1,500
Cochrane Creek	1,500
Crooked Lake Creek	1,000
Cross Lake	1,500
Crozier Creek	2,500
Deux Riviere Creek	2,500
Devils Lake	1,000
Diamond Lake Creek	1,500
Dodge Lake	2,000
Dominick Lake	1,500
Finley Creek	1,500
Gardez Pieds Creek	4,500
Godin Creek	250
Grant Creek	3,250
Green Lake Creek	1,500
Gultz Creek	1,500
Hammel Lake	200
Hart Lake	1,500
Harvey Creek	3,000
Heney Creek	2,000
Horton Creek	500
Hughey Creek	1,000
Indian River	3,000
Johnson Lake	500
Josie Creek	1,500
Kelly Lake Creek	3,500
Koehls Creek	1,500
Lake in the Hills	1,000
Locksley Lake Creek	2,500
Lost Lake	1,500
MacKay Creek	4,500
Marrow Lake	3,000
McDermott's Creek	1,250
Meilleur Lake	1,000
Miller's Lake	1,500
Nadeau Creek	1,500
Paugh Lake	3,000
Pumaille Lake	1,500
Quadville Creek	1,500
Rattery Lake	1,500
Reserve Creek	1,000

Rockingham Creek	1,500
Round Lake	4,000
Siroski's Creek	3,000
Smith Creek	2,500
Spring Creek	1,500
Stewart Creek	3,000
Toohey Lake	3,000
Trout Lake	1,500
Tucker Creek	3,000
Turner Creek	4,500
Unnamed Creek, Brougham	1,000
Wylie Creek	3,000

Simcoe:

Black Creek	1,500
Boyne River	1,000
Colwell's Creek	1,500
Hill's Creek	1,500
Matheson Creek	1,500

Sudbury:

Anderson Lake	5,000
Awry Creek	6,000
Barley Creek	15,000
Bertrand Creek	5,000
Bull Lake	19,000
Cameron Creek	2,000
Coniston Creek	5,000
Crystal Lake	3,000
Ella Lake	10,000
Emery Creek	5,000
Farm Lake	3,000
Fournier Creek	20,000
Geneva Creek	15,000
Green Lake	10,000
Johns Creek	30,000
Junction Creek	5,000
Karl Creek	2,000
Long Lake (Harrow)	1,000
Long Lake (Strathearn)	1,500
McLanders Creek	7,000
McLeod Creek	3,000
Michauds Creek	10,000
Moose Creek	4,000
Post Creek	4,000
Poulin Creek	10,000
Pumphouse Creek	30,000
Rapid River	9,000
Rock Lake	2,500
Round Lake	5,000
Sandcherry Creek	10,000
Sauble River	50,000
Second Lake	3,500
Shenango Creek	1,450
Shoal Lake Creek	1,000
Trout Creek	3,000
Trout Lake	2,500
Trout Lake (5-6)	4,000
Twin Lake	1,500
Veuve River	20,000
Waddell Creek	9,000
Wavy Creek	10,000
Windy Creek	20,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued

Thunder Bay:			Little Lake	2,000
Anderson Creek	2,400		Little Partridge Lake	2,400
Arnold Creek	1,000		Little Whitefish River	3,000
Arrow River	3,000		Loftquist Lake	18,500
Bass Creek	3,000		Log Lake	600
Bat Lake	2,000		Lonely Island Lake	2,000
Beardmore Creek	3,000		Loon Creek	2,000
Bear Trap Lake	3,000		Loon Lake	27,400
Beaver Lake	3,000		Lost Lake	2,400
Big Duck Lake	4,000		Lower Good Morning Lake ..	5,000
Big McKenzie River	12,000		Lower Pass Lake	3,000
Big Partridge Lake	3,000		Lower Twin Lake	2,400
Billy Creek	1,500		Lower Wiggins Lake	5,000
Bishop Lake	2,000		Mac's Lake	800
Blind River	7,500		MacGregor Lake	1,400
Bluff Lake	2,000		Maggot River	1,000
Boulevard Lake	3,000		McIntyre River	14,000
Brule Creek	7,000		McLean's Lake	2,500
Canadian National Rly. Lake			McVicar's Creek	9,000
Mile 51	1,500		Mine Lake	3,500
Cavern Creek	4,000		Mirror Lake	3,000
Cedar Creek	15,000		Moonshine Lake	2,750
Clearwater Creek	1,500		Moose Creek	3,000
Clearwater Lake	500		Moose Lake	3,000
Coldwater River	14,000		Morgan's Creek	2,000
Corbett Creek	5,000		Mountain Lake	500
Cousineau Lake	2,000		Mud Lake	308
Current River	12,000		Neebing River	28,500
Dan's Lake	2,400		Nilson Lake	2,000
Deception Lake	2,000		Nipigon River	58,400
Deep Lake	1,000		Nishin Lake	6,000
Devils Lake	2,000		Oliver Lake	12,500
Dublin Creek	4,000		Ozone Creek	2,900
Duck Lake	2,000		Paradise Lake	2,000
Fall Lake	2,000		Park Lake	1,500
Fire Lake	600		Parsons Lake	4,000
Fire Hill Lake	1,000		Pass Lake	12,000
Fischer Lake	4,000		Pearl River	6,000
Fraser Creek	6,000		Pickereel Lake	2,000
Golden Gate Lake	4,000		Pitch Creek	6,000
Good Morning Lake	10,000		Pocket Lake	500
Gowganda Creek	2,000		Rainbow Lake	3,000
Grand Lake	2,000		Rat Lake	1,600
Granite Lake	3,000		Ring Lake	6,400
Grass Lake	1,500		Ross Lake	3,000
Gravel Lake	3,000		Round Lake	2,000
Gravel River	6,000		Sameco Lake	2,000
Green Lake	3,000		Sand Lake	6,400
Gunderson Lake	1,000		Selim River	1,000
Hackle Lake	2,000		Silver Islet Lake	3,000
Half Moon Lake	2,000		Silver Lake	7,000
Hazelwood Creek	6,000		Single Lake	3,000
Hemdick Lake	4,000		South Sucker Creek	5,000
Hidden Lake	3,000		Sox Lake	2,500
Hornblend Lake	2,000		Spring Creek	6,000
Indian Lake	1,000		Spring Lake (Leduc)	2,000
Jackpine Lake	3,000		Spring Lake (McTavish)	400
Jackpine River	1,000		Squaw Creek	3,000
Jackson Lake	2,000		Star Lake	3,000
Johnson Lake	100		Strawberry Creek	6,000
Kaministiquia River	6,000		Surprise Lake	1,500
Lake Ada	2,000		Trout Creek	5,000
Lake Eva	3,500		Trout Lake (Jacques, etc.) ..	28,000
La Saga Lake	3,000		Trout Lake (Stirling)	24,000
			Twin Lakes	3,000
			Uncle Tom's Lake	3,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1939, to March 31st, 1940—Continued

SPECKLED TROUT—Continued**Thunder Bay—Continued.**

Unnamed Lakes and Creeks	2,500
Upper Morgan Creek	2,000
Upper Pass Lake	3,000
Upper Pearl River	6,000
Upper Twin Lakes	3,000
Walker Lake	6,000
Wanoga Lake	1,500
Warnford Creek	3,000
Whitefish River	6,000
Whitewood Creek	6,500
Wideman Lake	6,000
Wild Goose Creek	1,500
Wolf Lake	3,000
Wolf Pup Lake	3,000

Temiskaming:

Beaver Lake	800
Belle Lake	1,000
Boston Creek	1,000
Butler Lake	1,000
Calcite Creek	1,500
Charlotte Lake	1,500
Collacutt Lake	1,000
Crooked Creek	1,000
Crystal Lake	5,000
Dandurand Creek	1,200
Gleason Creek	1,000
Graham Lake	1,000
Green Lake	1,200
Halfway Creek	800
Hooker Creek	800
Jean Baptiste Lake	1,000
Lake of Bays	1,300
Latour Creek	1,000
Leacock Creek	1,000
Legare Creek	1,000
Linnament Lake	800
Little Otter	1,500
Loon Lake	1,500
Moffat Creek	1,500
Munro Lake	800
Nellie Lake	1,200
Pike Creek	1,500
Rowley Lake	1,300
St. Anthony Creek	1,000
Small Spot Creek	800
South Wabi Creek	1,000
Spring Creek	1,500
Sunshine Lake	1,500
Wabi Creek	1,000
Watabeag River	800
Wendigo Creek	1,000
Whiskey Jack Creek	1,800

Victoria:

Corbin's Creek	300
Crego's Creek	300

Waterloo:

Elora Creek	2,000
Erbsville Creek	1,200
Mannheim Creek	1,200

Wellington:

Bell's Creek	3,600
Dwyer Creek	300
Mallot's Creek	500
Mill Creek	600
Ospring Creek	600
Saugeen River	7,200

York:

Doan's Pond	150
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Miscellaneous:

Sales—Demonstration and propagation purposes	9,035
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ADULTS**Algoma:**

Island Lake	1,100
Lake Elizabeth	150
Lake Maude	150

Thunder Bay:

Cedar Creek	200
Coldwater River	985
Half Moon Lake	200
Loftquist Lake	800
Loon Lake	400
Moose Creek	200
Nipigon River	240
Spring Creek	250
Squaw Creek	300
Trout Creek	300
Trout Lake	800

Miscellaneous:

Sales—Demonstration and propagation purposes	240
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HERRING FRY**Frontenac:**

Rideau Lake	1,000,000
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Prince Edward:

Bay of Quinte	2,425,000
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Great Lakes:

Lake Erie	33,750,000
Lake Ontario	1,375,000

WHITEFISH FRY**Kenora:**

Eagle Lake	1,000,000
Lake of the Woods	15,894,000
Red Lake	500,000
Separation Lake	500,000
Trout Lake	600,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1939, to March 31st, 1940—Continued

WHITEFISH FRY—Continued

Manitoulin:

Manitou Lake 1,250,000

Prince Edward:

Bay of Quinte 61,100,000

Rainy River:

Rainy Lake 19,300,000

Thunder Bay:

Lake Nipigon 1,000,000

York:

Lake Simcoe 1,500,000

Great Lakes:

Lake Superior 6,465,000

North Channel 18,800,000

Georgian Bay 60,520,000

Lake Huron 26,015,000

Lake Erie 83,588,000

Lake Ontario 28,625,000

APPENDIX No. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES—1935 TO 1939, INCLUSIVE

	1935	1936	1937	1938	1939
Large-mouthed Black Bass					
Fry	130,000	45,000	135,000	57,500	.....
Fingerlings	2,153	8,398	4,120	8,061	1,890
Yearlings & Adults	27*	.....	92	.....	497
Small-mouthed Black Bass					
Fry	696,000	780,000	1,275,000	804,000	1,386,000
Fingerlings	153,065	69,380	141,900	169,800	226,325
Yearlings & Adults	3,435	5,202	5,893	7,738	7,739
Maskinonge					
Eyed Eggs .....	.....	.....	.....	.....	120,000
Fry	460,000	274,000	420,700	2,005,000	2,675,000
Fingerlings .....	.....	.....	.....	.....	1,300
Perch—Fry	53,031,400	46,080,000	9,150,000	59,150,000	72,360,000
Pickereel (Yellow)					
Eyed Eggs	2,000,000	2,000,000	2,000,000	2,012,500	7,000,000
Fry	229,629,000	300,759,500	263,743,400	271,567,500	327,500,000
Pickereel (Blue)					
Fry .....	.....	.....	1,000,000	500,000	.....
Brown Trout					
Fingerlings	109,000	147,050	.....	.....	29,954
Yearlings	9,650	7,290	97,484	.....	375,070
Adults	6*	.....	.....	59,592	.....
Lake Trout					
Eyed Eggs .....	.....	3,209,400	3,225,000	2,437,000	1,845,850
Fry	7,773,034	4,165,000	4,667,000	7,665,000	7,236,900
Fingerlings	14,564,000	18,253,244	15,782,350	10,575,200	9,964,400
Landlocked Salmon (Ouananiche)					
Yearlings	13,640	.....	.....	.....	.....
Atlantic Salmon—Fry .....	.....	.....	7,200	.....	.....
Yearlings .....	.....	.....	.....	4,800	.....
Rainbow Trout					
Eyed Eggs .....	.....	.....	.....	.....	.....
Fry .....	.....	.....	.....	.....	.....
Fingerlings	134,075	133,000	105,240	321,600	109,635
Yearlings	314	3,507	.....	6,727	23,145
Adults .....	.....	.....	.....	.....	1,009
Kamloops Trout—Fingerlings	85,464	.....	80,000	25,821	105,000
Yearlings	10,796	.....	.....	.....	.....
Speckled Trout					
Eyed Eggs .....	.....	28,600	.....	1,000	.....
Fry	1,645,000	182,000	.....	.....	.....
Fingerlings	5,013,831	1,053,050	384,725	373,314	337,000
Yearlings	35,421	557,270	1,167,073	2,083,538	2,976,559
Adults	5,420	6,081	16,150	4,452	6,315
Whitefish					
Eyed Eggs .....	.....	112,500	4,000,000	.....	.....
Fry	296,482,000	428,402,000	383,683,900	323,700,500	326,657,000
Herring					
Eyed Eggs .....	.....	.....	30,000	.....	.....
Fry	43,760,000	56,120,000	5,270,000	49,725,000	38,550,000
Golden Shiners	500	.....	.....	.....	.....
Miscellaneous .....	.....	.....	3,053	.....	41
TOTALS	655,747,231**	862,401,472	696,395,280	733,265,643	799,496,629

* Exhibition fish

** This total does not include a distribution of 132,646,600 fry and eyed eggs during the five months immediately preceding the said report.

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of

EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	825	3	15	\$ 10,200	143	\$ 67,245	272	\$13,802	539,295	\$ 65,160
Lake Superior	346	10	328	63,000	122	45,075	43	2,825	891,128	99,067
North Channel	199	8	118	45,200	55	32,680	45	2,780	631,668	74,811
Georgian Bay	432	17	490	110,624	130	109,740	134	5,955	1,329,395	137,282
Lake Huron	389	18	454	122,556	122	79,110	32	1,975	1,589,862	166,881
Lake St. Clair	132	.....	.....	.....	55	13,460	75	3,875	.....	.....
Lake Erie	943	36	786	276,400	188	221,375	125	6,530	2,100,663	249,146
Lake Ontario	612	.....	.....	.....	219	120,375	129	4,682	1,406,004	126,590
Southern Inland Waters	328	.....	.....	.....	14	2,770	107	3,828	.....	.....
Totals	4,206	92	2,191	\$627,980	1048	\$691,830	962	46,252	8,488,015	918,937

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickarel (Blue)	Pickarel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	897	1,649,657	258,818	744,792	125,066	1,294,169
Lake Superior	1,398,408	339,609	1,307,365	8,985	11,983	93,962
North Channel	5,133	157,238	504,365	64,028	.....	33,262
Georgian Bay	54,007	1,118,017	1,448,917	25,565	608	103,538
Lake Huron	263,127	115,061	1,250,115	616	4,344	213,410
Lake St. Clair .....	.....	650	.....	32,587	4,075	54,935
Lake Erie	1,973,355	2,312,167	25	97,217	5,910,769	586,100
Lake Ontario	1,626,994	664,595	268,835	87,794	100,538	10,259
Southern Inland Waters	305	9,979	37,362	1,685	1,566	4,587
Totals	5,322,226	6,366,973	5,075,802	1,063,269	6,157,383	2,389,635
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$266,111.30	\$700,367.03	\$558,338.22	\$63,796.14	\$307,869.15	\$262,859.85

No. 3

DEPARTMENT, ONTARIO

Province of Ontario, for the Year Ending December 31st, 1939.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
...	...	...	46	\$ 14,035	56	\$1,985	...	...	3,400	\$360	...	...	119	\$27,480	93	\$10,322	\$210,589
...	...	...	50	16,550	...	...	...	...	18	50	...	...	42	14,085	38	9,060	249,712
...	...	...	56	23,100	...	...	...	...	...	...	...	...	41	12,500	29	12,400	203,471
4	500	\$585	79	84,050	55	755	...	...	16,562	4,134	...	...	65	18,765	63	31,731	503,621
...	...	...	131	78,250	...	...	1	\$ 5	10,404	2,855	...	...	68	26,300	29	6,520	484,452
30	6,700	3,943	124	13,100	...	...	2	102	3,300	214	...	...	18	5,700	12	3,725	44,119
39	13,900	7,410	639	311,700	10	1,000	6	30	2,500	52	...	...	104	107,025	93	36,035	1,216,073
12	620	654	...	...	419	10,680	24	137	2,400	1,020	...	...	34	7,515	32	7,010	278,663
52	4,295	12,312	...	...	220	5,517	35	175	600	210	105	875	22	1,514	6	285	27,486
137	26,015	24,904	1,121	\$540,185	760	\$19,937	68	\$449	39,184	\$8,895	105	\$875	513	\$220,884	395	\$117,088	\$3,218,816

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
166,940	...	23,924	198,258	1,048	34,435	383,818	1,729	4,883,551	\$498,193.32
3,173	...	185	36,629	...	...	106,938	...	3,307,237	269,245.94
4,231	...	10,062	3,983	61	602	176,673	45	959,683	88,348.13
1,225	...	5,982	98,483	8,767	47,664	76,005	43	2,988,821	310,122.36
2,951	...	291,552	210,512	8,393	3,302	132,326	243	2,495,952	220,493.01
8,834	...	39,349	...	61,531	250,671	331,323	344	784,299	41,514.09
18,169	...	1,407,232	...	110,357	312,295	1,535,422	903	14,264,011	867,889.51
7,973	22,742	153,048	...	87,458	251,295	230,429	80	3,512,040	234,437.83
1,566	4,587	4,041	...	102,066	242,019	251,085	...	654,695	34,272.18
215,062	27,329	1,935,375	547,865	379,681	1,142,283	3,224,019	3,387	33,850,289	...
.40	.07	.05	.06	.08	.05	.03	1.00	...	...
\$86,024.80	\$1,913.03	\$96,768.75	\$32,871.90	\$30,374.48	57,114.15	96,720.57	3,387.00	...	2,564,516.37

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1938 Pounds	1939 Pounds	Increase Pounds	Decrease Pounds
Herring	4,702,917	5,322,226	619,309	.....
Whitefish	4,947,679	6,366,973	1,419,294	.....
Trout	6,040,471	5,075,802	.....	964,669
Pike	1,003,787	1,062,269	59,482	.....
Pickrel (Blue)	7,317,124	6,157,383	.....	1,159,741
Pickrel (Dore)	2,312,830	2,389,635	76,805	.....
Sturgeon	157,582	215,062	57,480	.....
Eels	52,606	27,329	.....	25,277
Perch	2,977,846	1,935,375	.....	1,042,471
Tullibee	759,778	547,865	.....	211,913
Catfish	474,058	379,681	.....	94,377
Carp	1,072,070	1,142,283	70,213	.....
Mixed and Course	3,091,352	3,224,019	132,667	.....
Caviare	3,841	3,387	.....	454
TOTALS	34,913,941	33,850,289	.....	*1,063,652

* Net Decrease

APPENDIX No. 6

STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO
1939

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring	5,322,226	\$.05	\$266,111.30
Whitefish	6,366,973	.11	700,367.03
Trout	5,075,802	.11	558,338.22
Pike	1,063,269	.06	63,796.14
Pickrel (Blue)	6,157,383	.05	307,869.15
Pickrel (Dore)	2,389,635	.11	262,859.85
Sturgeon	215,062	.40	86,024.80
Eels	27,329	.07	1,913.03
Perch	1,935,375	.05	96,768.75
Tullibee	547,865	.06	32,871.90
Catfish	379,681	.08	30,374.48
Carp	1,142,283	.05	57,114.15
Mixed and Course	3,224,019	.03	96,720.57
Caviare	3,387	1.00	3,387.00
TOTALS	33,850,289		\$2,564,516.37

APPENDIX No. 7

ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS
OF THE PROVINCE
1920—1939 INCLUSIVE

1920	\$2,691,093.74	1930	\$2,539,904.91
1921	2,656,775.82	1931	2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49
1927	3,229,143.57	1937	2,644,163.49
1928	3,033,944.42	1938	2,573,640.97
1929	3,054,282.02	1939	2,564,516.37

Thirty-Fourth Annual Report

OF THE

**Game and Fisheries
Department**

1940 - 1941

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1942



TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1942

TO THE HONORABLE ALBERT MATTHEWS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Fourth Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1941.

I have the honour to be,

Your Honour's most obedient servant,

H. C. NIXON,
*Minister in Charge,
Department of Game and Fisheries*

Toronto, 1942.



THIRTY-FOURTH ANNUAL REPORT

OF THE

Game and Fisheries Department of Ontario

TO: THE HONOURABLE H. C. NIXON,
Minister in charge,
Department of Game and Fisheries.

SIR:--

I have the honour to submit to you herewith the Thirty-fourth Annual Report of the Department of Game and Fisheries, outlining a summary of the activities of various Departmental services, and including statistical tables for the fiscal year ended March 31st, 1941, as well as tables of comparison.

INTRODUCTORY

The Province of Ontario has been endowed with a wealth of natural charm, with which have been incorporated many opportunities for the enjoyment of outdoor recreational pleasures. Its extensive water areas, virgin forests and wild lands all combine to make this Province a tremendous reservoir for the development of wild life. Notwithstanding the many physical changes that have taken place in past years it has been possible to maintain this outstanding characteristic in large measure, particularly in the northern hinterland.

In the development of the Province its vacation and recreational possibilities have not been neglected and the protection and propagation of fish and game have been maintained and extended so as to keep pace with material development. The excellent fishing and hunting which are available within our borders are undoubtedly important factors in promoting tourist trade, and the economic value of this seasonal industry is too obvious to require any comment except that it provides a living for thousands of our citizens, and in the present emergency plays a prominent part in establishing foreign exchange for the purchase of essential war materials.

This Department co-operated with the Provincial Travel and Publicity Bureau in providing an interesting and outstanding exhibit at the Sport Shows conducted in Chicago and Detroit during the months of February and March, 1941, with the object of endeavouring to attract increased numbers of American tourists to the Province. In each case considerable interest was displayed in the exhibit and the available literature was eagerly taken up. A special attraction at this exhibit was the regular showing of coloured moving pictures, replete with action, and demonstrating that the claim that Ontario is a sportsman's paradise was no idle boast. The friendly spirit of the people was very evident and, from the standpoint of improving the agreeable relations between two good neighbours, apart altogether from the economic value, the exhibit was quite successful.

The general protective programme has recognized the various phases affecting supply and demand and made provision to maintain a proper balance. Large areas of suitable land have been set aside as sanctuaries for game, ensuring reproduction and perpetuation. Small game has been intensively propagated and released to re-stock forest and field. Hundreds of millions of fish are artificially raised in the various

Departmental hatcheries and annually deposited in provincial waters, and in the ensuing pages it is indicated to what extent this programme was carried out during the period under review.

Legislation is effective only to the extent that the provisions thereof have the complete support of those for whose benefit it is provided, and the success of the conservation programme instituted by the Department in conjunction with legislation depends upon the full and active co-operation of all who are interested in our wild life resources. The general public can and does assist the Department in many ways, but chiefly by preventing waste and by a careful compliance with the provisions of the Game and Fisheries Act and the various regulations provided under this and affiliated legislation.

FINANCIAL

Since the change in the period of the fiscal year inaugurated by the present Administration in 1935, the total annual revenue collected from various sources by the Department of Game and Fisheries has, previous to the year under review, shown an increase each succeeding year, and it is only natural to expect that such a notable showing would eventually be terminated by a decreased collection in some particular fiscal year. Such decrease it is necessary to record for the year 1940-41, as is shown in the subjoined statistical table of revenues and expenditures for the past six years:—

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$ 683,938.72	\$451,041.91	\$232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99

It will be observed that as compared with the revenue derived in 1939-40 that collected during the year covered by this report shows a reduction in the amount of \$30,550.13. This decrease is not of sufficient proportions to cause concern and may be attributed principally to reduced collections from fur royalties in the neighborhood of \$15,000.00, and a reduction in fees secured from the sale of resident hunting licenses, slightly in excess of \$12,000.00, and from the sale of non-resident angling licenses, approximately \$7,000.00.

The following table of revenue collected shows the various sources from which it was derived and the respective amounts attributable thereto:—

REVENUE FOR THE FISCAL YEAR ENDED MARCH 31st, 1941.

ORDINARY—

MAIN OFFICE—

GAME—

Licenses—

Trapping	\$ 35,795.50
Non-resident hunting	84,265.00
Deer	77,469.40
Moose	2,948.00

REVENUE FOR THE FISCAL YEAR ENDED MARCH 31st, 1941—Continued

Licenses—Continued

Gun	86,527.85
Dog	5,746.10
Fur Dealers	27,323.00
Fur Farmers	8,637.50
Tanners	160.00
Cold Storage	178.00

\$ 329,050.35

Royalty	101,599.18
---------------	------------

\$ 430,649.53

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 85,914.00
Angling	384,675.00

\$ 470,589.00

Sales—Spawn taking	226.95
--------------------------	--------

Royalty	12,066.22
---------------	-----------

\$ 482,882.17

GENERAL—

Licenses—

Tourist Camps	\$ 7,345.00
Guides	7,456.00

\$ 14,801.00

Fines	25,416.28
-------------	-----------

Costs Collected (Enforcement of Game Act)...	786.78
--	--------

Sales—Confiscated articles, etc.	24,309.12
---------------------------------------	-----------

Rent	3,301.75
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Commission retained by Province on sale of lic.	2,170.30
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Miscellaneous	483.76
---------------------	--------

\$ 71,268.99

Net Ordinary Revenue	\$ 984,800.69
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One fact that is worthy of comment is the large proportion of the total amount of \$984,800.69 which was derived from the sale of non-resident licenses, both angling and hunting. Some forty-seven and a half per cent of the entire total, or \$468,940.00 was collected in this way, and this must be considered to be a remarkable showing when studied in conjunction with the feeling of uncertainty and dismay which generally prevailed in the summer of 1940 following the disastrous collapse of the French armies then engaged as our allies in the tremendous struggle against the Axis powers. The satisfactory conditions which are prevalent in the wildlife natural resources of Ontario's forests, streams and lakes, and which are an attraction and recreational benefit not only to our own sportsmen but also to non-resident anglers and hunters, are reflected to a remarkable degree in this excellent result.

Reference has already been made to the reduced departmental revenue, as compared with that of the previous year when for the first time since the establishment of the Department of Game and Fisheries it exceeded the one million dollar total, and to the fact that the decrease was not one to cause undue concern. In explanation it will be noted that the figure for 1940-41 was exceeded only once during the past six years, viz—in the preceding fiscal year, 1939-40, and the collection of revenue in that

year showed an extremely remarkable increase of more than \$100,000.00 over that of 1938-39.

As previously indicated the principal reduction in revenue may be attributed to the lesser amount of fur royalties which were collected during the year, and the sale of fewer resident hunting licenses and non-resident angling licenses. To a large extent reduced fur royalties could be assigned to a smaller catch of beaver, on the pelts of which animals the royalty is \$1.00, collected when they are exported from the Province or tanned. In 1939-40 two limited periods of open season were provided for the taking of beaver, and in which two periods 33,530 pelts were taken. This total represented some 12,000 pelts more than were taken in the open season which prevailed in 1940-41 in which year only one period for the taking of beaver was provided. In addition to this there was also a considerable reduction in the number of red fox which were taken in the 1940-41 season as compared with the season of 1939-40. Reduced revenue from the sale of resident hunting licenses may reasonably be assigned to the intensification of industry in connection with the manufacture of materials necessary for the effective conduct of the war in which our nation is now engaged which undoubtedly resulted in many who formerly participated in the sport which our hunting provides finding themselves without sufficient leisure for the pursuit of game to warrant their purchase of hunting licenses. The general feeling of uncertainty regarding the unfavourable war situation which prevailed throughout the summer of 1940 was no doubt responsible for the sale of fewer non-resident angling licenses, but the small total of this decrease warrants the statement that this reduction was due to the reason just stated rather than to any serious diminution in the quality or quantity of the diversified fishing privileges which are available in the waters of this Province.

However, the complete financial statement of revenue and expenditure is probably one of the best ever recorded by the Department. As compared with expenditures, both ordinary and capital, the revenue showed a surplus of \$471,965.99 during the period under review. This favourable showing was achieved by the exercise of rigid control of expenditures, and the elimination of all unnecessary expense. Capital expenditures were reduced to practically an absolute minimum, only a total sum of \$3,823.70 being spent under this classification. The largest capital expenditure amounted to \$1,846.18, for the installation of a concrete whitefish and herring battery at the Provincial Fish Hatchery at Glenora, in Prince Edward County. For the erection of a cabin at the Martin River Camp, in the Temagami area, for the use of the local Game and Fisheries enforcement officer, was spent the sum of \$541.58. The balance of \$1,435.94 was used to provide necessary alterations and improvements at a few of the fish hatcheries.

As has now been the case for many years the most important items of ordinary expenditure have resulted from the maintenance in the field of the officers whose services are retained to provide enforcement of the various provisions of the Game and Fisheries Act and Regulations, and the operation of the Fish Hatcheries and distribution of fish under the Fish Culture Branch. Enforcement cost \$210,536.88, while \$184,121.76 was expended in connection with the work of the Fish Culture Branch. Other items of expenditure include, \$13,963.71 for the purchase and distribution of pheasants, particularly in the Townships which have been designated as Regulated Game Preserve Areas, and in other areas in which suitable conditions prevail; \$16,477.43 for the payment of wolf bounties and sundry expenditures incidental thereto, and of which amount the sum of \$16,410.00 was actually paid as bounty; as well as \$6,400.00 for various grants, details of which are as follows:—\$1,000.00 for fisheries research work, particularly in the waters of Algonquin Park, under the supervision of Professor W. J. K. Harkness of the University of Toronto staff, \$2,500.00 to the Ontario Fur

Farmers' Association to assist them in their endeavours to develop the fur farming industry throughout the Province, \$1,000.00 to the Ontario Federation of Anglers to enable this organization to continue its campaign to secure better compliance with and observance of provisions of the Fisheries Regulations, and \$1,900.00 to Messrs. Jack Miner and Thomas N. Jones and Miss Edith L. Marsh to encourage their efforts along the lines of providing a measure of protection for birds on sanctuaries maintained by them on their respective properties in the Counties of Essex, Elgin and Grey.

GAME

The following table shows the comparative details of the various resident and non-resident hunting licenses which were issued for use during the open seasons which were provided during the year, together with information of a similar character for the three preceding years. Details of the reduced numbers which were sold, to which previous reference has been made will be noted, though some increase will be observed in the following instances, viz:—resident "moose", non-resident "general" and non-resident "bear (spring season)".

	1937-38	1938-39	1939-40	1940-41
Resident Deer	18,672	21,762	21,416	20,219
Resident Deer (Camp)	283	307	323	310
Resident Deer (Farmers)	6,503	7,719	7,722	6,486
Resident Moose	580	471	497	536
Resident Gun	90,756	114,580	113,992	97,218
Non-Resident Deer	1,036	1,329	1,492	1,291
Non-Resident "General"	1,043	569	593	755
Non-Resident Small Game	1,634	1,618	1,567	1,377
Non-Resident Bear (Spring Season)	30	49	108	161

The conservation of wild life is not something peculiar to that particular resource. It is common to every phase of our existence. It is the sensible practice of making the best use of every resource with which we have been so lavishly endowed by Nature, and by ensuring that these resources will not be wilfully dissipated as a result of our own shortsightedness. Wild life is a public heritage, and the laws and regulations which are now in effect to govern hunting within the Province embody the results of years of practical experience and research. They afford protection during the reproductive periods, provide for limited open seasons and restrict the seasonal take to correspond with the available resources. These laws are quite comprehensive because the resources, territory and climatic conditions are extremely varied, yet a moment of reflection will readily supply the reasons for every restriction.

The following is a summary of conditions which apply to the various species of game animals and birds which are prevalent in Ontario, and which summary is compiled from reports submitted by Game and Fisheries Overseers throughout the Province:—

DEER:—This species is quite plentiful throughout the northern portion of the Province and in the more northerly districts of Southern Ontario, and in these sections continues to provide excellent sport for interested hunters during the fall open season. The protection of an entire close season which has been provided for the past several years in certain southwestern and eastern counties has resulted in quite a noticeable

increase in the herds in many of these counties and more particularly in Grey and Bruce. The regulations which at present exist for the protection of deer and a continuation of the existing co-operation on the part of the general public will undoubtedly ensure perpetuation and possible improvement of the deer herds which now inhabit Ontario. During the year under review provision was made to have the general open season in the most southerly division extend for a period of nineteen days, as has been the case in previous years, but commencing on the first Monday in November. The hunting of deer was also permitted during the period from November 11th to November 16th, inclusive, in the Townships of Amabel, Albemarle, Eastnor, Lindsay and St. Edmund in the Bruce Peninsula, though the use of dogs for such hunting during this open season in these five Townships was not permitted. An open season for deer was provided in that portion of the County of Carleton lying west of the Rideau River conforming with the general season in Southern Ontario and extending from November 4th to 19th, inclusive. And, further, a Regulation was provided to prohibit any hunting of deer during 1940 in the Counties of Durham, Northumberland and Prince Edward.

MOOSE:—Conditions are such with reference to moose that the hunting of this species is confined to that portion of the Province lying north and west of the French and Mattawa Rivers and Lake Nipissing. Moose is not too plentiful in any section of this northern portion of the Province, though some improvement is reported from various Districts, particularly in the two areas in the northwest and east in which all hunting of moose was prohibited during the preceding two years and which improvement resulted in the provision of an open season in these two areas, extending from October 15th to November 25th, inclusive, and which action was taken in accordance with a popular demand therefor. There are but few areas in Southern Ontario in which moose are to be found, and even in these sections their numbers are extremely limited and scarce. Some increase, though very slight, is reported from North Renfrew, North Addington and North Muskoka.

CARIBOU:—Caribou are extremely scarce throughout the Province. None are to be noticed in the southern portion of the Province, and the same condition applies in the Districts of Nipissing, Temiskaming and Manitoulin. In the remaining territory their numbers are negligible, and little or no improvement was reported from any place. They are protected by a close season throughout the entire year, and the present condition of this particular species demands a continuation of this complete protection for its perpetuation even in limited proportions.

ELK:—The only elk in Ontario are those which were originally imported from Western Canada several years ago in co-operation with the National Parks Branch of the Federal Department of Mines and Resources, and the subsequent natural increase. Some few specimens are located in Bruce County, on Beausoleil Island in Georgian Bay off the shore of Simcoe County, and on the Peterborough and Petawawa Crown Game Preserves in the Counties of Peterborough and Renfrew respectively, though reports from these areas indicate but little improvement. Additional numbers were placed on Crown Game Preserves in the Districts of Nipissing, Temiskaming, Sudbury, Algoma and Thunder Bay, and in the majority of these instances some increase in their numbers has been noticed. During 1940 a shipment of eight of these animals was completed from the Petawawa Crown Game Preserve to the Nipissing Crown Game Preserve. The hunting of elk is prohibited throughout the entire year.

BUFFALO:—With the co-operation of the Department of Mines and Resources of Canada, (National Parks Branch) a car-load of buffalo, consisting of sixteen heifers and four bulls, was imported from Alberta and these animals were placed on the Burwash Crown Game Preserve, in the District of Sudbury. While reproduction has

been small there has been but little mortality among the animals which were originally introduced.

BEAR:—These animals are reported to be quite plentiful throughout the various Northern Ontario Districts, and in the Districts of Parry Sound, Muskoka and Haliburton and in the County of Renfrew. They may be hunted or trapped under the authority of the proper licenses and there is no doubt many enjoy the pleasure which the hunting of these animals provides. During the spring bear season of 1940, that is from April 1st to June 15th, the Department issued one hundred and sixty-one (161) non-resident hunting licenses, and it may be of interest to say that since the inauguration of this particular season, some four years ago, there has been an increasing interest displayed by non-resident hunters in the possibilities for recreation and relaxation thus made available.

RABBITS:—Reviewing reports with reference to rabbits it would appear that with the exception of a very few counties the various species continue to be fairly plentiful in the southern areas. In general terms the prevailing species in the extreme southern and southwestern portions of the Province are cotton-tail rabbits and European hare, the latter commonly known as the jack-rabbit,—while the snowshoe rabbit, or varying hare, exists in the eastern counties and in the areas to the north. Conditions applicable to rabbits were quite favourable throughout the season, except in Northern Ontario, where these animals were reported to be not too plentiful though probably increasing in number. Rabbit hunting is a favourite sport of Ontario hunters during the late fall and winter months, and a large percentage avail themselves of the pleasure which is to be derived from this splendid type of healthy exercise. The restricted daily catch of cotton-tail rabbits which is now effective in several of the southwestern counties has probably assisted in some measure in the increase which has been reported from these areas.

PARTRIDGE:—The improvement which has been observed in more recent years continued during the period covered by this report, and considerable increase was reported from many sections principally in the case of ruffed grouse. The sharp-tailed grouse, or prairie chicken, is confined to the extreme northern and northwestern portions, though their numbers could not be described as plentiful. However, general conditions throughout were sufficiently satisfactory to warrant the declaration of a short open season. Two periods were included in this open season, viz:—October 1st to October 15th, inclusive, and November 4th to November 16th, inclusive. Limits of catch were five birds per day, and twenty-five birds in all during the two periods. This open season did not apply in the Counties of Essex and Kent nor in the Townships established as Regulated Game Preserve Areas. In these last mentioned Counties and Townships the open season for partridge coincided with the open season for pheasants.

PHEASANT:—Climatic conditions restrict the area in which pheasants can be successfully introduced with any certain hope of permanent establishment therein. While it is not native to the Province it has been possible through intensive re-stocking in areas providing favourable conditions to sufficiently develop the pheasant population in such areas to assure such a measure of successful hunting as to warrant a limited open season for the taking of this splendid game bird. In recent years the Department has proceeded with a scheme of Regulated Game Preserve Areas in which all hunting is controlled and where these birds are liberated, and which scheme in 1940 included some seventy-one Townships or parts of Townships situated in the Counties of Lambton, Middlesex, Elgin, Oxford, Norfolk, Brant, Haldimand, Welland, Lincoln, Wentworth, Wellington, Halton, Peel, York, Ontario and Prince Edward. Conditions favourable to the propagation of these birds also prevail in areas other than these Regulated Townships, particularly in the County of Essex, including Pelee

Island, and in the County of Kent, and in which Counties provision has also been made for the distribution of these birds. Details of this distribution which was made in 1940 are indicated by the following statistics:—adult pheasants and poults totalling 16,688 were distributed, 14,963 in the Regulated Townships and 1,725 for general re-stocking outside of these areas,—County of Brant (three Townships) 664 birds; County of Elgin (five Townships) 1,000 birds; County of Haldimand (ten Townships) 1,862 birds; County of Halton (four Townships) 1,315 birds; County of Lambton (one Township) 200 birds; County of Lincoln (eight Townships) 1,650 birds; County of Middlesex (two Townships) 425 birds; County of Norfolk (four Townships) 820 birds; County of Ontario (three Townships) 750 birds; County of Oxford (one Township) 200 birds; County of Peel (five Townships) 940 birds; County of Prince Edward (one Township) 120 birds; County of Welland (eight Townships) 1,685 birds; County of Wellington (one Township) 200 birds; County of Wentworth (eight Townships) 1,459 birds; and County of York (seven Townships) 1,673 birds. The record of the general re-stocking additional to the foregoing shows 1,000 birds liberated in the County of Essex, 400 of which were placed on Pelee Island, 600 birds in the County of Kent, 75 birds in the County of Huron and 50 birds in the County of Brant. The regulations governing the open season fixed October 31st and November 1st on Pelee Island, with a limit of five birds per day, or ten for the season, with the provision that three of the total take could be hen birds conditional upon the payment of \$1.00 each for such hens. In the Regulated Game Preserve Areas the open season was October 25th and 26th, and an additional day, November 1st, provided the Municipal authorities in any Township issued their special hunting licenses therefor. In fifty-two Townships the two-day season prevailed, while the three-day season was in effect in nineteen Townships. Limits of catch were three cock birds per day. The same three-day open season was provided for the County of Essex (excluding Pelee Island) and the County of Kent, as well as the limit of three cock birds per day.

HUNGARIAN PARTRIDGE:—The efforts of the Department to secure the establishment of this species in the Province have up to the present not been very successful, except in a few areas. The only localities in which they are found to any extent are in a few of the southwestern and extreme eastern counties, and even in these areas their numbers are not too plentiful. Improvement is reported only from the eastern counties. The open season in 1940, viz, October 25th and 26th and November 1st applied only in Essex (excluding Pelee Island) and Kent. Two birds per day constituted the limit of catch.

QUAIL:—Only in a few of the most extreme southwesterly counties are these birds to be found where they are not very numerous, though localized increases have been reported. The only section in which an open season was provided was in the County of Essex (excluding Pelee Island) and the County of Kent, on October 25th and 26th and November 1st. The bag limit during this open season was four birds per day.

DUCKS:—Reports from many sections, particularly in Southern Ontario, would seem to indicate some considerable improvement in the number and variety of ducks available during the open season, which generally resulted in a successful season for a majority of those sportsmen who participate in the hunting thus provided. Since 1935 the hunting regulations which are provided by the Federal authorities under the Migratory Birds Convention Act, have been made more restrictive and an active programme to provide refuges and improved nesting conditions in the far north has been carried on, all of which factors have contributed to the increase previously mentioned, and provided there is no natural set-back should continue to prove effective in maintaining and possibly improving the existing conditions as they apply to this variety of wild water-fowl.

GEESE:—This species does not play an important part in the general scheme of hunting in Ontario. Conditions remained pretty much the same as has been stated in Departmental annual reports for the past several years. Successful hunting of this variety of wild water-fowl is restricted, in Ontario, to the shores of James Bay in the far north and to the extreme southwestern Counties. In other sections they are seen only in flight during the fall and spring migration periods and provide very little sport in the way of hunting.

WOODCOCK:—While these birds, generally speaking, are not too plentiful, they continue to provide a measure of satisfactory sport for interested hunters in various sections of the Province, and more particularly in some of the Counties along the shore of Lake Erie and immediately to the north thereof as well as in the southeastern counties.

SNIFE:—These birds are not very plentiful in any portion of Ontario and are therefore not hunted very extensively. While general conditions are not favourable reports state there has been some improvement and resulting increased numbers in a few widely separated areas.

POLOVER:—There are but few sections in which these birds can be described as anything but scarce, and little improvement has been observed. Plover are protected throughout the year by regulations provided under the Migratory Birds Convention Act.

FUR-BEARING ANIMALS

Conditions as they apply to fur-bearing animals throughout the Province are summarized in the following references from reports submitted to the Department by members of the Field Service Staff:—

BEAVER:—This very desirable species of fur-bearer is quite prevalent in most sections of the Province except some of the counties in the extreme southwestern peninsula and in eastern Ontario. In Northern Ontario and in some of the northern districts in Southern Ontario reports would appear to indicate that conditions were such as to warrant the provision of a limited open season and restricted catch. The regulations governing this open season specified that it would be effective from December 1st to December 21st, 1940, both days inclusive in the territory lying north and west of the French and Mattawa Rivers and Lake Nipissing, including the District of Manitoulin, as well as in the Districts of Parry Sound and Muskoka. Licensed trappers were permitted to take not more than ten pelts during this open season and it was further specified that trappers were to dispose of the pelts taken on or before December 31st. According to returns submitted to the Department some 21,605 beaver pelts were taken during this open season, and it has been estimated that the value of these pelts to the various trappers concerned was in the neighborhood of half a million dollars.

FISHER:—These animals are extremely scarce throughout the entire Province, and reports indicate that they are practically extinct in the southern portion. The catch is diminishing quite rapidly.

FOX:—Generally speaking it would appear that this species was not too plentiful during the year under review, though reports show some increase in different sections. There was quite a reduced catch in comparison with previous years.

LYNX:—This species has become non-existent in Southern Ontario, and it is extremely scarce in the north. No improvement is reported from any section, and the annual take continues to show a decrease.

MARTEN:—As in the case of fisher and lynx, marten are extremely scarce, and no improvement has been reported. The catch in the case of this species also shows a decided reduction.

MINK:—While these animals are reported to be not too plentiful there are indications that their numbers are increasing in many areas, though probably not to any material extent. The slight increase in the number taken during the open season may be attributed to improved conditions to which previous reference has been made.

MUSKRAT:—It is again possible to report an increase in the catch of this species, some fifty thousand more pelts being taken than was the case in the previous year, though conditions which applied to muskrat remained practically the same. The open season is provided by Regulation and this arrangement is perhaps the most satisfactory in that it is possible to take advantage of propitious weather conditions, and thus confine the season to a limited period in which there would be little or no interference with natural propagation. These pelts do not bring an exceptional price on the market, but by reason of the fact they can be caught in large numbers the returns to the trapper are of substantial worth. It has been estimated that the 740,000 pelts taken in 1940 were worth approximately \$1,500,000.00, or more than half the value of the total fur catch of the year.

OTTER:—Some improvement is reported from sections in the northern portion of the Province, and, while otter are not too plentiful, the catch for the year covered by this report was better than the average for the past ten years, and was exceeded in that time only by the catch in the preceding year, 1939-40.

RACCOON:—There was a decided decrease in the take of raccoon as compared with that of the previous year. It is found only in the more southerly portions of the Province, due to the extreme cold weather which prevails during the winter months in the north. Conditions with regard to this species remain unchanged.

SKUNK:—Continues to be very plentiful, but their obnoxious methods of defence, coupled with a low market value, discourage any general efforts by trappers for the taking of this species.

WEASEL:—There was a decided decrease in the number of weasel which were trapped during 1940, as compared with the number taken in the previous year. This cannot be attributed to any substantial decrease in the numbers available, and is probably due to the diminished demand for these pelts, and the resulting poor prices derived from the sale thereof.

The following comparative table shows the numbers of pelts of the various species of fur-bearing animals which were exported from and dressed within the Province during the year under review in addition to the three years immediately preceding:—

	1937-38	1938-39	1939-40	1940-41
Bear	496	363	295	274
Beaver	235	1,366	33,530	21,605
Fisher	1,463	1,467	1,382	858
Fox (Cross)	2,426	2,164	981	722
Fox (red)	24,912	22,366	19,925	15,059
Fox (silver or black)	201	131	101	67
Fox (white)	47	142	36	91
Lynx	1,284	785	514	383
Marten	1,709	2,074	1,790	1,439
Mink	22,766	25,111	36,518	38,976
Muskrat	343,972	508,893	689,706	739,224
Otter	3,737	3,764	4,101	3,931
Raccoon	13,194	9,493	14,493	11,973
Skunk	61,576	89,100	74,176	72,005
Weasel	79,853	93,488	95,832	53,719
Wolverine	5	3	2	2

From reports received from various licensed fur dealers it has been possible for the Department to estimate that trappers received a total of \$2,677,211.26 from the catch of fur during 1940-41, an increase of some fourteen per cent over the previous year, and which increase may be assigned to the general improvement in muskrats, both take and market value.

The product of licensed fur farms, comprised wholly of fox and mink, disposed of during the year by such fur farm operators had an estimated value of \$1,246,847.66, an increase of almost \$200,000 over the previous year, making the value of the total fur production of the Province in 1940-41 the sum of \$3,924,058.92.

FUR FARMING

The propagation of fur bearing animals in captivity continues to be an industry of considerable economic importance, particularly during war time, as a large percentage of the fur production is exported thereby establishing valuable foreign exchange. Due to the prevailing uncertainty as regards future markets and the rising cost of feed some recession was recorded, though 1841 fur farms were licensed during the calendar year of 1940, the period covered by such licenses, a reduction of only four per cent.

The subjoined comparative table shows the total breeding stock retained on these licensed premises as at the first day of January in each of the four years therein enumerated, and from which it will be noted that these operations are restricted principally to silver fox and mink:—

	1938	1939	1940	1941
Beaver	25	2	4	13
Fisher	16	19	27	26
Fox (cross)	235	197	168	134
Fox (red)	140	120	96	65
Fox (silver or black)	24,848	22,923	18,327	16,034
Fox (blue)	0	98	209	397
Lynx	2	2	2	2
Mink	21,982	30,378	31,989	34,277
Muskrat	302	267	235	179
Raccoon	351	284	243	139
Skunk	9	6	10	7
Marten	11	15	19	16
Otter	0	0	2	2

This breeding stock retained on licensed fur farms as at January 1st, 1941, was estimated to have a replacement value of \$2,094,341.00.

Departmental compilation of fur records shows that licensed fur farmers during the year 1940-41 disposed of the following pelts from stock raised on their premises, viz:—

62,281 mink, 59,790 of which were exported and the remaining 2,491 dressed in the Province.

34,282 silver and black fox, of which 25,001 were exported and the remaining 9,281 dressed in the Province.

285 blue fox, of which 282 were exported, and the remaining 3 dressed in the Province.

202 cross fox, of which 111 were exported and the remaining 91 dressed in the Province.

CROWN GAME PRESERVES

Practical protection has been afforded wild life through the setting aside of extensive areas of land as sanctuary for game. At the present time the various Game Preserves scattered throughout the Province have a combined area of approximately thirteen thousand five hundred square miles. Much of this land is still in the Crown, particularly in Northern Ontario, but many of the smaller areas have been set aside with the consent of the land-owners. Much of the land is wild land, particularly suited for the development of large and small game, while in the southern section of the Province they are well adapted to the protection and propagation of upland game, including birds.

During the period under review only one new Game Preserve was established. This was the Kapisko Beaver Sanctuary, situated in the District of Patricia. The primary function of this Sanctuary is to enable the Department, with the co-operation of the Hudson's Bay Company, to restock the area with beaver, control the annual take, and provide a restricted trapping ground for the benefit of Indians resident in the Province. The trapping of fur-bearing animals other than beaver will be permitted to resident Indians.

The following changes and renewals were made in the case of existing Game Preserves:

The boundaries of the Nipissing Crown Game Preserve were altered to conform with changes in the location of Provincial Highway No. 11 which forms the western boundary of this Game Preserve.

The boundaries of the Waterloo Crown Game Preserve, situated in the County of Waterloo, were revised and some additional land included in the area.

The Wilder Lake Crown Game Preserve, located in the Township of Egremont, County of Grey, and the Woodlands Crown Game Preserve, located in the Township of Trafalgar, County of Halton, were renewed for a further period of five years, to November, 1945.

A further measure of protection and control is afforded through the scheme of Regulated Townships. The regulations provide that those who hunt in these regulated areas must have special hunting licenses issued by the respective Municipal Councils, with the approval of the Department, in addition to the regular hunting licenses required under the provisions of the Game and Fisheries Act, and which has the effect of restricting the number of hunters who may operate in any particular area and thus avoid congestion. During the year the following Townships were incorporated in the scheme, viz: Township of Whitchurch in York County, that part of the Township of Toronto lying north of the Queen Elizabeth Highway in Peel County, Townships of Flamboro West and Glanford in Wentworth County, Township of Dunwich in Elgin County, and the Township of Plympton in Lambton County. The total number of Townships included in the scheme following these additions was seventy-one.

WOLF BOUNTIES

The following is a comparative table of condensed wolf bounty payments and statistics for the current fiscal year and the preceding four years:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1937	1,090	1,197	31	2,318	\$33,360.63
For year ending Mar. 31, 1938	1,022	837	30	1,889	27,474.24
For year ending Mar. 31, 1939	1,031	723	41	1,795	25,357.00
For year ending Mar. 31, 1940	1,107	614	22	1,743	25,058.12
For year ending Mar. 31, 1941	738	400	8	1,146	16,477.43

Since 1933 the rate of bounty has been \$15.00 on adult wolves and \$5.00 on wolves under the age of three months. An amendment to the Wolf Bounty Act, under which these payments are made, and which was enacted during the 1941 Session of the Legislature, provided that the bounty to be paid on wolves killed after March 1st, 1941, shall be \$25.00 on adults and \$5.00 on wolves under the age of three months.

Reference to the previous table indicates a progressive reduction in the number of wolves destroyed each year and on which bounty was paid, and it is quite possible that the increased bounty provided might stimulate operations which have as their object the destruction of these predators.

During the year 1940-41 nine hundred claims for bounty were submitted for consideration. These claims were in respect to a total of 1,162 pelts, though claims for bounty on some sixteen of these pelts, which were not wolves, were refused.

Bounty was paid to 752 persons who collected a total of \$17,550.00, of which the sum of \$1,140.00 was paid by County Treasurers on wolves killed within such Counties, the bounty in such cases being paid by the Counties, forty per cent thereof being rebated by the Department.

From information supplied on the applications for bounty it would appear that 500 of these animals were taken by wire snares, 293 were shot, 279 were trapped, and the balance by methods not indicated on the claims. It has been ascertained that Indians were responsible for the killing of 341 of these wolves, 319 were killed by farmers, 199 by fur trappers, and the balance by park rangers, guides, hunters, etc.

The following table sets forth in detail the sources of origin and variety of the wolf pelts for which application for bounty was made:—

ANALYSIS OF APPLICATIONS FOR WOLF BOUNTY

County or District	Number of Timber	Number of Brush	Number of Pups	Total Pelts
Algoma	70	38	4	112
Bruce	12	4	...	16
Cochrane	18	...	...	18
Frontenac	2	6	...	8
Haliburton	10	...	...	10
Hastings	6	2	...	8
Huron	1	1	...	2
Grey .....	...	5	...	5
Kenora	167	72	4	243
Kent .....	...	1	...	1
Lambton .....	...	2	...	2
Lanark	10	...	...	10
Leeds .....	...	1	...	1
Lennox & Addington	2	5	...	7
Manitoulin	15	67	...	82
Middlesex .....	...	4	...	4
Muskoka	19	4	...	23
Nipissing	66	12	...	78
Norfolk .....	...	7	...	7
Northumberland .....	...	1	...	1
Ontario	2	7	...	9
Parry Sound	41	1	...	42
Patricia	30	6	...	36
Peel	1	...	...	1
Peterboro	2	...	...	2
Rainy River	73	60	...	133
Renfrew	26	2	...	28
Sudbury	62	52	...	114
Simcoe	11	3	...	14
Temiskaming	6	...	...	6
Thunder Bay	88	40	...	128
Victoria	5	5	...	10
Wellington .....	...	1	...	1
Totals	745	409	8	1,162

Administration of the Wolf Bounty Act during the year under review resulted in a total expenditure of \$16,447.43, of which the sum of \$16,410.00 was actually paid as bounty. Details of this expenditure are as follows:—

Brush Wolves	51 @ \$ 6.00.....	\$ 306.00
	334 @ \$15.00.....	5,010.00
	15 @ \$25.00.....	375.00
	400	\$ 5,691.00
Timber Wolves	69 @ \$ 6.00.....	\$ 414.00
	4 @ \$10.00.....	40.00
	640 @ \$15.00.....	9,600.00
	25 @ \$25.00.....	625.00
	738	\$10,679.00
Pups	8 @ \$ 5.00.....	\$ 40.00
	8	\$ 40.00
TOTAL	1,146	\$16,410.00
Expenses	.....	67.43
Total Cost	.....	\$16,477.43

GENERAL

TOURIST OUTFITTERS:—

The licensing of hunting and fishing camps catering to the tourist trade in Northern Ontario (north and west of the line of the Canadian National Railway running between Parry Sound and Pembroke) was continued. Notwithstanding some uncertainty as to the tourist trade during war time, twenty-five more camps were licensed than in the previous year. Of the 667 camps operated under license, 615 were owned by residents of Ontario and 52 by non-residents. These camps were located as set forth in the following table:—

Algoma	95
Cochrane	6
Kenora	157
Manitoulin	58
Nipissing	96
Parry Sound	117
Patricia	2
Rainy River	32
Renfrew	13
Sudbury	57
Temiskaming	4
Thunder Bay	30
Total	667

THE BULLETIN:—

An enlightened public opinion is the best means of securing that co-operation without which no law can be a success. With this in mind the Department has continued to issue its bi-monthly Bulletin. This publication in addition to providing

information concerning Departmental activities, covers many phases of natural history and contains other articles of an educational nature. It circulates to the press, the Sportsmen's Organizations, and to an extensive list of private individuals, teachers, etc., which list has been built up over a period of years through personal application. Over eighteen hundred copies are mailed each issue, but because of the nature of the mailing list it is safe to assume that its sphere of usefulness and influence as an educational medium is much greater than the circulation would imply.

GAME AND FISHERIES ACT:—

There were no amendments to the Game and Fisheries Act enacted during the session of the Legislative Assembly held in 1940, though special regulations were adopted by Order-in-Council in accordance with the provisions of subsection 1 of Section 6 of the said Act, as follows:—

- (a) The period of the spring bear season was extended, and is in effect from April 1st to June 15th.
- (b) Licenses to authorize the use of fire-arms for hunting purposes in the Counties of Essex and Kent, restricted as to period, and are valid only from October 1st to January 31st, next following.
- (c) Prohibiting the use of snares for the taking of beaver at any time.
- (d) Prohibiting the use of snares for any purpose in the Counties of York and Ontario.
- (e) Providing a limit of catch on cotton-tail rabbits of six per day in the County of Lincoln.
- (f) Prohibiting the purchase or sale of cotton-tail rabbits in the County of Lincoln.

ENFORCEMENT SERVICE

ETERNAL vigilance is the watchword of those who are engaged in the work of law enforcement, and the Game and Fisheries Overseer whose job it is to see that the various provisions of the Game and Fisheries Act and regulations are observed belongs to that service whose ceaseless watching is a necessary part of our scheme of life. But for his persistent activity the wild life of the Province would soon suffer severely from illegal destruction. During the year under review there were between eighty and ninety officers permanently engaged in this work of patrol and supervision, and whose services were augmented by temporary officers employed for varying periods when their assistance was most desirable. In addition the Department also receives the close co-operation of Provincial Police constables in the work of enforcement. There are also hundreds of Deputy Game and Fisheries Wardens, private individuals who sufficiently interest themselves in this work of protection to secure the authority provided under such appointments to enable them to act individually or in conjunction with the regular Overseers in the matter of preventing offences against the Game and Fisheries Act.

Due to the extensive land and water areas of the Province each Overseer must of necessity cover a large territory, but despite long patrols these field officers are quite active in the discharge of their duties.

The Department would, of course, prefer to find law observance so complete that seizures and prosecutions would be unnecessary, but a minority of more or less thoughtless and frequently unscrupulous persons, whose activities are a menace to conservation make constant vigilance imperative.

And in this connection Departmental records show that during 1940-41 there were 1345 instances in which offenders were apprehended by various members of the enforcement services, and on which occasions equipment being used unlawfully, and fish, game and pelts, taken contrary to the regulations, were confiscated from those apprehended. In 1176 of these cases the seizures were made by Game and Fisheries Overseers, Deputy Game and Fisheries Wardens were responsible for the action in 67 cases, seizures were made in 26 cases by Provincial Police constables, while in the remaining 76 cases co-operative action by Overseers, Deputy Game Wardens and Provincial Police resulted in the seizures.

The following is a summary of the articles confiscated:—

Live animals	in 5 cases
Birds, game animals and meat	in 166 cases
Fire-arms and ammunition	in 401 cases
Fish	in 165 cases
Nets and fishing equipment	in 224 cases
Angling equipment	in 118 cases
Pelts and hides	in 293 cases
Traps and trapping equipment	in 160 cases
Canoes, rowboats & motor boats	in 43 cases
Outboard motors	in 15 cases
Automobiles and trucks	in 19 cases
Flashlights, spot-lights & lanterns	in 26 cases
Spears	in 57 cases
Miscellaneous articles	in 45 cases

Responsible for the apparent discrepancy in these total figures when compared with the actual number of seizures carried out would be the fact that individual seizure reports would in many cases apply to more than one article, i.e. some reports would cover traps and pelts, fire-arms and game, fishing tackle and fish, lights and spears, as well as other combinations.

Included among the miscellaneous articles which were seized in the 45 cases reported are eleven haversacks and packsacks, ten suitcases and trunks, one hundred and seventeen duck decoys, six axes, one battery and three ferrets.

Seized pelts included 1152 beaver, 39 fox (various species) 77 mink, 1817 muskrat, 22 otter, 38 raccoon, 18 skunk, 98 squirrel, 80 weasel, 1 fisher and 1 lynx, in addition to 95 hides of deer, moose, etc.

Confiscated fire-arms were as follows:—184 .22 rifles, 56 heavy calibre rifles, 56 single barrel shotguns, 72 double barrel shotguns, 26 repeating shotguns, 4 automatic shotguns, 4 pistols and revolvers, and 32 air guns.

Subsequent prosecutions were provided in 1,138 cases, the action being instituted by Game and Fisheries Overseers in 1,082 of these cases, by Provincial Police constables in 31 cases, by Deputy Game Wardens in 14 cases, and by co-operative action in 10 cases, while in one case the charges were laid by a private individual in a trespass case under Section 65 of the Game and Fisheries Act. In 1,078 cases convictions were registered, 47 charges were dismissed, and in 13 cases the charges were withdrawn by the officers responsible therefor.

Upon reference to the statement of revenue which appears earlier in this report it will be observed that fines amounting to \$25,416.28 were collected during the fiscal year ending March 31st, 1941, as a result of these prosecutions, and of this amount \$11,990.00 was paid by some eleven persons apprehended with unlawful beaver

pelts in their possession. The fines in these specific cases varied from \$100.00 to \$3,630.00 according to the number of pelts involved in each violation. Not only were these fines assessed but the beaver pelts found in their possession, and totalling 487, were also confiscated and included in the sales of furs conducted by the Department, the proceeds of which sales are also public funds. Beaver pelts included in the Departmental sale conducted in the month of October, 1940, averaged approximately \$20.00 per pelt, so that in addition to their fines these offenders also forfeited to the Crown some \$9,740.00 derived from the sale of their pelts. Verily, the way of the transgressor is hard!

THE FISH CULTURE BRANCH

During the year the Department operated twenty-seven hatcheries and rearing stations. By means of these facilities the culture of fish was carried out in a satisfactory and effective manner.

Apart from maintenance, additional hatchery construction consisted of the completion of the Hill Lake Trout Rearing Station and the construction of a new battery for whitefish, herring and pickerel at the Glenora hatchery.

THE CULTURE AND DISTRIBUTION OF FISH

The total distribution of fish of various sizes and ages exceeded that of any previous year. Excellent progress was made in culturing and distributing small-mouthed black bass, large-mouthed black bass, maskinonge, pickerel, speckled trout, herring and whitefish.

Speckled Trout:

The following statistics indicate the progress being made in the culture and distribution of yearling and older stages of this valuable native game fish.

1936	563,351
1937	1,183,223
1938	2,087,990
1939	2,982,874
1940	3,285,264

The production of yearling speckled trout in 1940 was 10 per cent higher than that of the previous year. In addition, 611,000 fingerlings which could not be accommodated in the hatcheries or ponds were distributed.

Brown Trout:

In excess of one-quarter million yearlings and approximately 182,000 fingerlings were distributed. Favourable reports of successful angling in the larger, lower reaches of certain southern Ontario streams, where brown trout have been introduced, are indicative of the success being achieved with this species.

Rainbow Trout:

(a) Steelhead trout—

The small increase in the number of yearlings distributed was compensated by the fingerling distribution, which was more than double that of the previous year. Distribution was made in water areas in which this species has become established.

(b) Kamloops trout—

The Kamloops trout is the common trout of the interior of British Columbia, occurring throughout the Fraser river drainage above Hell's Gate canyon and throughout most of the basin of the Columbia river in British Columbia. Unlike its close relative, the rainbow trout, it does not descend to the sea. Considerable differences exist in the characteristics of the species from different habitats, as to colouration, size, markings, etc., and even in large lakes confusing differences occur among individuals of the same species.

Generally speaking, they mature and spawn in their fourth year, although under certain conditions they might not spawn until their fifth year. Spawning takes place in creeks from April to June. It is stated that some of them spawn on the beaches of lakes at the mouths of streams tributary to the lakes. In some cases, Kamloops trout spend their whole lives in streams.

Only a limited amount of authentic information is available on the feeding habits of Kamloops trout. It is reasonable to expect that insects form the bulk of the food of specimens under sixteen inches at all seasons, but the staple food of the larger specimens is probably fish. The kokanee, a diminutive salmon, occurs in very large numbers in most lakes where the Kamloops trout reaches any considerable size, and is preyed upon by the latter.

The Kamloops trout is an excellent game fish, and is taken on the fly and by trolling. When caught it makes a terrific fight for freedom, combining a series of mad rushes and violent leaps with violent shaking of the head. It fights like the steelhead trout and requires considerable skill to land. The best fly fishing is obtained in streams and small lakes and at the mouths of streams flowing into larger rivers and lakes. The usual weight of the fish taken is from three to four pounds, although they grow to a much larger size; there are records up to thirty-five pounds.

Small consignments of eyed Kamloops trout eggs were imported from Kamloops, B.C., each summer from 1934 to 1937, inclusive. The largest losses were experienced immediately after arrival, particularly in hatchery waters in which a rapid upward surge in temperature occurred. The original importation to the Pembroke Trout Rearing Station was experimental but it is evident from later observations that Kamloops trout eggs hatch normally and without serious loss in spring water of approximately constant temperature, for example, at the Sault Ste. Marie and Chatsworth Trout Rearing Stations.

Normandale ponds were used for rearing parent fish, since it was expected that the location and climatic conditions would be congenial for the species. In 1938 the Kamloops breeders at Normandale spawned for the first time, and limited numbers of eggs were collected at that time and during subsequent spawning seasons. Special mention is made of this fact since it was an accomplishment not previously recorded in eastern North America. It was reported on good authority that this experiment was made in a pond in the east prior to 1938 but was not successful.

Previous annual reports contain information on the distribution of Kamloops trout in Ontario. Successful angling has been reported from Echo lake, in the district of Muskoka, and Bloom lake, in the district of Nipissing.

On account of its excellent game qualities and the fact that it becomes established in an environment similar to that inhabited by our eastern or native brook trout, and since, unlike its close relative the rainbow, it is non-migratory, controlled distribution in Ontario was recommended. Twenty-six thousand five hundred yearlings

were distributed this year. The previous distribution of yearlings of this species was in 1935. The Kamloops trout is the common trout of the interior of British Columbia occurring throughout the Fraser river drainage above Helli's Gate canyon and through Lake Trout.

There was an increase of 4.5 per cent in the distribution of lake trout fry and a decrease of 26.6 per cent in the distribution of fingerlings. Individuals of the same species exist in the characteristic size markings etc. and even in large lakes containing different sizes of fish.

Whitefish:

An increase of 23.5 per cent in the distribution of whitefish fry as compared with that of the previous year was achieved. This commendable increase was due to the splendid cooperative efforts of our hatchery officers, spawning crews and commercial fishermen.

Herring:

The distribution of herring fry was 27 per cent more than the previous year, a very creditable showing.

Yellow Pickerel (Pike-Perch):

The percentage increase in the number of pickerel fry distributed was approximately the same as that recorded during the previous year, namely, 20.3 per cent.

Following the customary procedure, 2,000,000 eyed eggs were handled by the Sparrow Lake hatchery, and the fry were distributed over suitable natural spawning grounds in Sparrow lake.

Small-Mouthed Black Bass:

Exceptionally good progress was made in the culture of small-mouthed black bass. The percentage increased distribution of fry and fingerlings was 81.3 and 98.5 per cent, respectively.

Large-Mouthed Black Bass:

Two hundred and thirty thousand fry and 5,500 fingerlings were successfully reared and distributed from two small ponds at Mount Pleasant, a very commendable distribution considering the limited pond areas under cultivation.

Yellow Perch:

The number of perch eggs available in the vicinity of Kingsville hatchery, Lake Erie, is subject to wide fluctuation each year. This production was much lower in 1940 than in the two years immediately preceding, but higher than in 1937.

Considering the commercial value of the perch, the collection of spawn in the absence of a closed season is important.

Maskinonge:

The distribution of maskinonge fry was 12.3 per cent less than that of the preceding year, but this was greatly offset by an increase of 79.5 per cent in the distribution of fingerlings.

For the second time in the history of the Department, maskinonge fingerlings of sizable proportions were reared by the pond method, namely, 1,300 in 1939, and 2,333 in 1940. This work was outlined in detail in the previous annual report.

CLOSED WATERS

One of the most promising methods of conserving the breeding stock of fish is to close parts of natural water areas to fishing. In these areas the fish thrive

without interference and spread to other parts of the same river or lake. By such means a permanent breeding stock is set up, and there is taken each year only the natural increase from it.

In addition to the waters already closed for the natural protection and propagation of fish, the following were closed during the year, April 1, 1940, to March 31, 1941:

1. **BLACK DUCK LAKE (Part of Deer Bay),**
Township of Harvey, County of Peterborough.
2. **CEDAR CREEK (Part),**
Township of Dumfries North, County of Waterloo.
3. **CHEMONG LAKE (Part),**
Townships of Smith and Emily, Counties of Peterborough and Victoria.
4. **DEEP BAY (Part of Sparrow Lake),**
Township of Matchedash, County of Simcoe.
5. **GOOSE LAKE (Part of Scugog River),**
Township of Fenelon, County of Victoria.
6. **GOOSE LAKE,**
Townships of Fenelon and Somerville, County of Victoria.
7. **HARVEY CREEK or NOGIE'S CREEK,**
(From the dam at Bass Lake to the dam near Pigeon Lake),
Townships of Galway and Harvey, County of Peterborough.
8. **LITTLE MUD LAKE,**
Township of Smith, County of Peterborough.
9. **MASKINONGE CREEK,**
(From Maskinonge Lake to Little Vermilion Lake, and part of Maskinonge and Little Vermilion Lakes),
Townships of Pickering, Echo and Vermilion, District of Kenora.
10. **McINTYRE RIVER, from mouth to John Street Road, Port Arthur, and**
NEEBING RIVER, from mouth to First bridge on Arthur Street, Fort William.
11. **NEWBORO LAKE (Part),**
Townships of Crosby North and Crosby South, County of Leeds.
12. **ORINICON LAKE (Part, locally known as "Drowned Land"),**
Township of Crosby South, County of Leeds.
13. **SEARIGHTS BAY (Part of North River),**
Township of Belmont, County of Peterborough.
14. **STREAM connecting Sand Lake and Wolfe Lake,**
Township of Crosby North, County of Leeds.
15. **TAYLOR'S BAY (North River Bay), and MUNN'S BAY (Belmont Lake),**
Township of Belmont, County of Peterborough.
16. **TWELVE MILE CREEK (Part south-east of Highway No. 5),**
Townships of Nelson and Trafalgar, County of Halton.
17. **WHITEFISH, BASS and CLEAR LAKES,**
Township of Humphrey, District of Parry Sound.

All of the waters enumerated above are closed to protect black bass and maskinonge, with the exception of No. 2, for speckled trout, No. 10, for rainbow trout, No. 14, for pickerel, and No. 17, for lake trout.

REMOVAL OF COARSE FISH

From December 27, 1940, to February 8, 1941, hoop nets and trap nets were operated in Ahmic lake and tributary waters, for the removal of ling and suckers. One thousand five hundred and twenty-seven ling and 234 suckers were caught. The average weight of the ling and suckers was 5 lbs. and 2½ lbs., respectively.

BIOLOGICAL SURVEYS

A biological survey of Curley lake, concession VI, lot 26, township of Glenelg, county of Grey, indicated that it was suitable for large-mouthed black bass.

Lake Scugog was examined to determine the suitability of certain areas as sanctuaries for maskinonge. One of these areas is located at the south tip of Scugog island and the other at King's bay, located at the northwest side of the lake.

A site for a dam between Hart lake and Loughborough lake was investigated; the dam is desirable in order to keep Loughborough lake at a more normal level.

Pollution of a branch of the Credit river, in the township of Esquesing, county of Halton, was investigated. A small stream flowing through Georgetown enters this branch just south of the town, carrying with it wastes from a paper processing plant. The pollution of the Moira river was also investigated.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, continued field and laboratory studies of lakes and streams in Algonquin Park.

Following the procedure of the previous year the members of the laboratory cooperated with the Park staff in distributing speckled trout yearlings provided by the Ontario Department of Game and Fisheries. The lakes stocked are included in the lists in Appendix No. 1, under the district of Nipissing. Speckled trout planted in Brewer, Cache, Costello and Opeongo lakes were marked by removal of the adipose fin. This year one of the Park trucks was equipped with tanks making it possible to transport the fish earlier in the season and to plant them while the surface waters of the lakes were still quite cool, which should add greatly to their chances of survival. It is extremely important that we should measure the success of these plantings, and all persons fishing in the lakes in which speckled trout have been planted are urged to report their catches through the medium of the creel census.

The first successful planting of lake herring in lake Opeongo as food for the trout was accomplished this year by transferring 250 six inch lake herring from Mary river near Huntsville.

The transport of adult lake trout from more inaccessible to heavily fished waters was not successful. The pound nets were set in White Trout lake, but presumably owing to the extremely backward season the trout did not run and not enough were caught to warrant the expense of continued fishing.

Three of the smaller lakes, Jacks, Sproule and Sunday, accessible from the highway and which do not offer fishing at present were investigated. These seem suitable for trout and an attempt to develop fishing in them is planned.

In all, twenty-one lakes were closed to fishing in 1940. These lakes will be open in 1941. Raven, Head and Merchant lakes, which were closed in 1939 were open in 1940. No creel census reports were received from Raven lake but the fishing in both Head and Merchant showed the benefit of the year's respite. The availability of lake trout in Head lake was almost twice as great in 1940 as in 1938. The situation in Merchant lake is more complicated owing to the history of the fishery there but there is no doubt that the fishing was substantially improved by closure. Owing apparently to a slow growth rate, a single year's closure does not make a marked change in the size composition of lake trout catches, but it does in the case of speckled trout. Merchant lake which was famous for the size of its speckled trout in the past, but which had more recently been disappointing in this respect, again yielded some nice catches in 1940. The Ontario Fisheries Research Laboratory is anxious to receive full reports of fishing in these lakes through the creel census in order to assess the benefits of closure.

It was not possible to carry on as extensive a creel census in 1940 as in previous years. It is of interest to note that 1940 is the first year in which bass were reported in any numbers from Happyisle lake, although they were known to occur there. This rise of a bass population to a fishable level is a further and, it is to be hoped, a last spread of this species in the Opeongo drainage. The creel census of lake Opeongo has now been carried on for five years. The accumulated data have not only enabled the investigators to follow the trend of the lake trout fishery there but are now also sufficient to make a first approximation of the spawning escapement. It remains to be seen whether the escapement in 1936 was sufficient to maintain the stock. An answer to this should be found in the next two years when the young fish resulting from the 1936 spawning will be entering the fishery. Enough creel census returns for bass have now been received to make possible a classification of the bass fisheries similar to that established for the lake trout. Bass lakes in which the average length of the fish captured is between eleven and twelve inches produce the greatest availability of these fish. Most of the creel census work was confined to Algonquin South but records were also gathered for lake Traverse and vicinity. This is of particular importance since lake Traverse is the only lake in the Park offering lunge fishing.

The investigations of the food habits of the game and forage fish were continued. The work on the food and growth of the yellow perch is almost completed. The routine examination of the stomach contents of lake trout, speckled trout and bass was continued at lake Opeongo.

The study of the whitefish population in lake Opeongo was continued; there are dwarf individuals which mature at two years as well as the more usual individuals that grow to three pounds, or more, and mature at four years.

Studies were made on the quantitative methods of sampling the plankton population of certain lakes. Tests were made on the use of a smaller and more convenient form of the tube sampler which has proved to be more accurate than other samplers currently in use.

Stream studies, carried out from early May until mid-September were concerned with the insect fauna and the speckled trout. Two locations were selected, Mud creek, a tributary of the Madawaska river near the east gate of the Park, and the rapids below Tea lake dam on the Oxtongue river. At the former location the quantitative distribution of aquatic insects on different types of bottom and in different reaches of the stream was studied. Changes in the fauna of a rapids flooded out by a beaver pond last year were followed, showing some interesting results which were reported at the meeting of the American Fisheries Society held at

Toronto in September. At Tea lake dam an opportunity was afforded of investigating the feeding of speckled trout. Quantitative collections of the insects emerging from the water which form a large percentage of the trout food were made and trout were taken and their stomach contents are being examined to find what elements of the food available to the trout are eaten by them at different times of the day and year. During this study it was noted that the trout were absent from the rapids below the dam from approximately the 20th of July to September 1st.

Work carried on in the experimental laboratory at Opeongo was concerned with various ways in which environment may affect or limit the activities of fish. An investigation of immediate practical importance to our technique of restocking was to ascertain what surface temperatures might be considered unfavourably high for the planting of speckled trout. It was found that speckled trout, straight from the holding troughs, would die within twenty-four hours if placed in water at 73° F. Further, the gradual equalizing of the temperature of the water in the fish can to that of the bath over a period of fifteen minutes gave no appreciable benefits. However, by first exposing the fish to a moderately high temperature for twelve hours (65° F.) it was possible to raise the lethal temperature from 73° F. to 79° F., even although the fish had been returned to cooler water over night. A study of the lethal temperatures of the various species of fish in the waters of the Park was begun.

Studies on the respiratory tolerance of fish were continued, and experiments on the circulatory capacity of fish were conducted by measuring the volume of blood passed by the heart at each stroke. This apparently differs widely in different species of fish and we believe it may be one of the differences between those fish which can live in warm water and those which cannot.

ACKNOWLEDGMENTS

The Department is indebted to the Ontario Federation of Anglers and Hunters and its many constituent Fish and Game Protective Associations throughout the Province and to the Northern Ontario Tourist Trade Association, as well as to interested sportsmen and conservationists for their active co-operation and splendid assistance in the protection of the provincial fish and game resources. The activities of these Associations and individuals have undoubtedly played a prominent part in developing the spirit of conservation now prevalent in the Province, and have materially helped to make our work in the Department more agreeable and pleasant.

In closing this report I desire to make reference to the work of the staff. Members of the service, both inside and outside, generally have been conscientious in the performance of their work, and courteous in their contacts with the public, in an endeavour to assure the best results.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries.

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Elgin:

Pinafore Lake	10,000
Union Pond	10,000

Frontenac:

Collins Lake	10,000
Mississippi River	10,000
Pine Lake	10,000
Shircliff Lake	5,000

Grenville:

Rideau River	10,000
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Grey:

McCulloch Lake	2,000
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Haldimand:

Grand River	45,000
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Haliburton:

Big Bob Lake	15,000
Elephant Lake	15,000
Gull Lake	15,000
Head Lake	15,000
Koshlong Lake	15,000
Kushog Lake	15,000
Mink Lake	15,000
Miserable Lake	15,000
Monk Lake	15,000
Mountain Lake	15,000
Paradise Lake	15,000
Placid Lake	15,000
Round Lake	15,000
South Lake	15,000

Halton:

Twelve Mile Creek	10,000
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Hastings:

Baptiste Lake	15,000
Bass Lake	10,000
Beaver Creek	5,000
Bennett Lake	20,000
Big Salmon Lake	10,000
Burnt Lake	5,000
Crow Lake	5,000
Crow River	5,000
Fraser Lake	5,000
Gull Lake	5,000
Gunter Lake	5,000
Jordan Lake	5,000
Little Salmon Lake	5,000
Moir Lake	20,000
Moir River	10,000
Oak Lake	10,000
Parks Creek	10,000
Pine Lake	5,000
Spring Lake	10,000
Trent River	10,000

Wadsworth Lake	5,000
Weslemkoon Lake	10,000

Lanark:

Bennett Lake	10,000
Black Lake	10,000
Christie Lake	10,000
Clear Lake	5,000
Otty Lake	10,000
Pike Lake	10,000
Silver Lake	10,000

Leeds:

Benson Lake	5,000
Cranberry Lake	5,000
Little Long Lake	5,000
Little Rideau Lake	10,000
Lyndhurst Lake	5,000
Newboro Lake	10,000
Opinicon Lake	5,000
St. Lawrence River	25,000
Sand Lake	10,000
Singleton Lake	10,000
Traynor Lake	5,000
Whitefish Lake	5,000

Lennox-Addington:

Bass Lake	5,000
Beaver Lake	5,000
Buckshot Lake	10,000
Cedar Lake	5,000
Duck Lake	5,000
Lime Lake	5,000
Long Lake	10,000
Loon Lake	15,000
Otter Lake	5,000
White Lake	5,000

Manitoulin:

Bass Lake	15,000
Kagawong Lake	15,000

Middlesex:

Thames River	20,000
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Muskoka:

Camels Lake	5,000
Clearwater Lake	5,000
Davis Lake	5,000
Deer Lake	5,000
Devine Lake	5,000
Dickie Lake	5,000
Duck Lake	5,000
Gillies Lake	5,000
Haleys Lake	5,000
Kashe Lake	15,000
Lake Joseph	5,000
Leach Lake	5,000
Little Sand Lake	5,000
Long Lake (Draper)	5,000
Long Lake (Stephenson)	5,000
MacKay Lake	5,000
Mainhoods Lake	5,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1940, to March 31st, 1941—Continued

SMALL-FOUNTHED BLACK BASS**—Continued****Muskoka—Continued**

Martin Lake	5,000
Muskoka Lake	30,000
Muskoka River	5,000
Poverty Lake	5,000
Rosseau Lake	5,000
Three Mile Lake	5,000
Tookes Lake	5,000
Wood Lake	5,000

Nipissing:

Beaver Lake	5,000
Bruce Lake	5,000
Herridge Lake	5,000
Lake Champlain	5,000
Little Martin Lake	5,000
Martin Lake	5,000
Martin River	5,000
McPhee Lake	5,000
Nosbonsing Lake	5,000
Olive Lake	5,000
Opechee Lake	5,000
Talon Lake	5,000
Wasing Lake	5,000
Wickstead Lake	5,000

Northumberland:

Rice Lake	20,000
Trent River	35,000

Ontario:

Severn River (N. Branch) ..	20,000
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Parry Sound:

Ahmic Lake	20,000
Arthur Lake	5,000
Bain Lake	5,000
Barton Lake	5,000
Bass Lake (Humphrey) ..	5,000
Beaver Lake (Bethune) ..	5,000
Billies Lake	5,000
Blackwater Lake	15,000
Caribou Lake	5,000
Cecbe Lake	10,000
Charter Lake	5,000
Clear Lake	5,000
Coles Lake	5,000
Commanda Lake	5,000
Deer Lake (Lount)	25,000
Deer Lake (Wilson)	5,000
Doe Lake	5,000
Eagle Lake	5,000
Hamers Lake	5,000
Jack's Lake (Armour)	10,000
Jack's Lake (Mills)	5,000
Kawigamog Lake	5,000
Kelcey's Bay	5,000
Lake Joseph	5,000
Lake of Many Islands	30,000

Lake of the Woods	5,000
Limestone Lake	5,000
Little Clam Lake	5,000
Little Lake Joseph	5,000
Little Long Lake	5,000
Long Lake (Mills-Wilson) ..	10,000
Louisa Lake	5,000
Lynch Lake	10,000
Maganetawan River	10,000
Manitowaba Lake	5,000
Manson Lake	5,000
Maple Lake	5,000
Mary Jane Lake	5,000
McQuaby Lake	5,000
Memesagamesi Lake	5,000
Mill Lake	5,000
Neighick Lake	10,000
Pickrel Lake	20,000
Portage Lake (Humphrey) ..	5,000
Portage Lake (McDougall) ..	5,000
Rankin Lake	5,000
Restoule Lake	5,000
Rosseau Lake	5,000
Ruth Lake	5,000
Sharrows Lake	5,000
Shawanaga Lake	5,000
Shebeshekong Lake	5,000
Silver Lake	5,000
Six Mile Lake	5,000
Spring Lake (Lount)	10,000
Squaw Lake	5,000
Stanley Lake	5,000
Star Lake	5,000
Stormy Lake	5,000
Sucker Lake	5,000
Ten Mile Lake	5,000
Toad Lake	5,000
Trout Lake (Humphrey) ...	5,000
Turtle Lake	5,000
Whitefish Lake	5,000
Whitestone Lake	5,000
Wilson Lake (Hagerman) ..	5,000
Wilson Lake (Wilson)	5,000
Wolf Lake	5,000
Wolf River	5,000
Woodcock Lake	5,000

Peel:

Credit River	10,000
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Peterborough:

Big Cedar Lake	5,000
Chemong Lake	15,000
Clear Lake	10,000
Deer Bay	10,000
Indian River	10,000
Jack's Lake	10,000
Katchiwano Lake	10,000
Little Cedar Lake	5,000
Little Lake	5,000
Long Lake (Burleigh)	10,000
Long Lake (Douro)	5,000
Loon Lake	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Peterborough—Continued

Lovesick Lake	10,000
Otonabee River	20,000
Pigeon Lake	15,000
Stony Lake	20,000
Trent River	5,000
White Lake	5,000

Prince Edward:

Consecon Lake	8,000
Roblins Lake	8,000
West Lake	8,000

Renfrew:

Bonnechere River	10,000
Hurds Lake	10,000
Olmstead Lake	10,000

Simcoe:

Deep Bay Sanctuary	30,000
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Stormont:

St. Lawrence River	15,000
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Sudbury:

Agnew Lake	30,000
Metagamiesi Lake	15,000
Nepahawin Lake	12,000
Penage Lake	40,000
Ratter Lake	10,000
Spanish River	30,000
Wanapitei Lake	30,000
Whitewater Lake	15,000

Timiskaming:

Lake Timagami	10,000
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Victoria:

Balsam Lake	25,000
Burnt River	15,000
Crooked Lake	15,000
Dalrymple Lake	20,000
Pigeon Creek	10,000
Round Lake	15,000
Silver Lake	10,000
Sturgeon River	20,000

Waterloo:

Black River	10,000
Grand River	10,000
Nith River	10,000
Paradise Lake	10,000

Wellington:

Puslinch Lake	20,000
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FINGERLINGS

Algoma:

Aberdeen Lake	2,000
Alma Lake	3,000
Bear Head Lake	1,000
Caribou Lake	2,000
Cloudy Lake	2,000
Cooper Lake	2,000
Desbarats Lake	2,000
Diamond Lake	2,000
Elbo Lake	4,000
Friendly Lake	4,000
Gordon Lake	2,000
Iron Lake	2,000
Jiggery Lake	500
Kapuskasing Lake	1,000
Keichel Lake	1,000
Lonely Lake	2,000
Long Lake (Victoria)	1,000
Marie Lake	2,000
Marion Lake	1,000
McCarroll Lake	2,000
Miller Marsh Lake	2,000
Patton Lake	2,000
Pipe Lake	1,000
Rock Lake	2,000
Unnamed lake in U Tp....	3,000
Windfall Lake	5,000

Brant:

Grand River	600
Oakland Pond	500

Bruce:

Arran Lake	3,000
Boat Lake	3,000
Chesley Lake	4,000
Isaac Lake	2,000
Sauble River	3,000
Saugeen River	2,000
Silver Lake	1,000

Carleton:

Ottawa River	1,000
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Cochrane:

Baart's Lake	500
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Frontenac:

Bass Lake (Loughborough) ..	1,000
Big Clear Lake	1,000
Bobs Lake	2,000
Brule Lake	1,000
Buck Lake (Bedford)	1,000
Buck Lake (Kennebec)	1,000
Collins Lake	1,000
Cranberry Lake	1,000
Cross Lake	1,000
Crotch Lake	1,000
Crow Lake	1,000
Devil Lake	1,000
Eagle Lake	3,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Frontenac—Continued

Farm Lake	1,000
Fortune Lake	1,000
Gull Lake (Clarendon)	1,000
Horseshoe Lake	500
Indian Lake	1,000
Kashwakamak Lake	2,500
Long Lake (Olden)	1,000
Long Lake (Portland)	1,000
Loughborough Lake	4,000
Marble Lake	500
Mazinaw Lake	1,000
Mink Lake	1,000
Mississagagon Lake	2,000
Quebec Lake	500
Riley Lake	500
Rock Lake	500
Salmon Lake	1,000
Sand Lake	1,000
Sharbot Lake	1,000
Shaw Lake	1,000
Sydenham Lake	1,000
Varty Lake	1,000
White Lake	1,000

Grenville:

Nation River	1,000
Rideau River	1,000

Grey:

Francis Lake	3,000
Mountain Lake	1,000
Pearl Lake	1,000

Haliburton:

Bark Lake	1,000
Bat Lake	2,000
Bay at mouth of Buck Lake	2,000
Cameron Lake	2,000
Cranberry Lake	500
Kashagawigamog Lake	2,000
Long Lake	3,000
Maple Lake	2,000
Moore Lake	3,000
Paul Lake	2,000
Pete Lake	2,000
Seeton Lake	2,000
Third Lake	2,000

Hastings:

Baptiste Lake	1,500
Crow River	1,000
Hinchcliff Lake	1,000
Loon Lake	500
Moir Lake	1,000
Tongamong Lake	1,000
Whetstone Lake	1,000

Huron:

Maitland River	1,000
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Lanark:

Dalhousie Lake	1,000
Gillies Lake	500
Horn Lake	500
Kerr Lake	1,000
Mississippi River	1,000
Patterson Lake	1,000
Round Lake	1,000

Leeds:

Charleston Lake	1,500
Gananoque Lake	1,000
Lower Beverley Lake	1,000
Red Horse Lake	1,000
Rideau Lake	1,000
Sand Lake	1,000
Whitefish Lake	1,000

Manitoulin:

Bayfield Sound	7,500
Big Lake	3,000
Ice Lake	6,000
Lilly Lake	5,000
Loon Lake	5,000
Manitou Lake	6,500
McGregor Bay	1,200
Mindemoya Lake	12,000
Silver Lake	6,000
South Bay	20,000
Tobacco Lake	6,000
Whitefish Lake	2,500

Muskoka:

Abbs Lake	1,000
Crooked Lake	1,000
McKay Lake	1,000
Six Mile Lake	1,000
Walker Lake	1,000

Nipissing:

Bear Lake	500
Cache Lake	3,000
Clear Lake	500
Cowley Lake	500
French River	2,250
Kaibuskong Lake	500
Little Sturgeon Lake	500
Lower Twin Lake	500
Moore Lake	500
Muskosung Lake	3,000
Nipissing Lake	4,500
Poplar Lake	500
Spruce Lake	500
Talon Lake	500
Tomiko Lake	6,000
Trout Lake	10,000
Turtle Lake	500
Wistiwasing Lake	500

Norfolk:

Waterford Gravel Pit Pond..	600
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Northumberland:			Mississauga Lake	1,000
Rice Lake		800	Oak Lake	1,000
Ontario:			Round Lake	2,654
Lake St. John		1,000	Sandy Lake	900
Parry Sound:			Stony Lake	2,000
Bass Lake (Hardy)		500	Talon Lake	800
Bass Lake (Patterson)		1,000	Trout Lake	800
Big Lake		500	Twin Lake	1,000
Blue Lake		500	Wolf Lake	800
Crane Lake		1,000	Renfrew:	
Crooked Lake		1,000	Calabogie Lake	1,000
Devolve Lake		500	Chats Lake	1,000
Eagle Lake		1,000	Constant Lake	1,000
Goose-neck Lake		1,000	Ferguson Lake	1,000
Haynes Lake		500	Frederick Bay	1,000
Horseshoe Lake		1,000	Green Lake	500
Irish Lake		500	Hyde Bay	500
Lennon Lake		1,000	Loon Lake	500
Long Lake		500	Mink Lake	1,000
Loon Lake		500	Moccasin Lake	500
Maganetawan River		500	Morans Lake	500
McVeety Lake		1,000	Round Lake	1,000
Milton Lake		500	Smiths Lake	500
Moffat Lake		500	Stones Lake	1,000
Mud Lake		1,000	White Lake	1,000
Nipissing Lake		2,000	Simcoe:	
Oastler Lake		500	Bass Lake	2,000
Orange Lake		500	Cook's Lake	2,000
Rainy Lake		1,000	Couchiching Lake	2,000
Shoal Lake		1,000	Gloucester Pool	3,000
Smith Bay		1,000	Kempensfeldt Bay	2,000
Spring Lake		1,000	Nottawasaga River	2,500
Trout Lake (McDougall) ..		1,000	Park Lake	3,000
Watt Lake		1,000	Sudbury:	
Wiggins Lake		500	Bass Lake (Dennison)	2,500
Wolf Lake		500	Bass Lake (36-37)	3,000
Wright Lake		500	Charlton Lake	2,500
Peterborough:			Cranberry Lake	3,000
Bald Lake		900	Cross Lake	750
Bass Lake		800	Edith Lake	750
Belmont Lake		800	French River	1,750
Bottle Lake		900	Frood Lake	2,500
Buck Lake		1,500	Howry Lake	1,500
Catchacoma Lake		1,500	Ivanhoe Lake	750
Chemong Lake		1,000	LaCloche Lake	1,000
Crab Lake		800	Maple Lake	1,000
Crystal Lake		800	McCharles Lake	2,500
Duck Lake		800	Nelson Lake	1,500
Eagle Lake		1,800	Nipissing Lake	500
Gold Lake		900	Penage Lake	4,000
Jack's Lake		800	Poulin Lake	3,000
Kashabog Lake		1,000	Shanty Bay	1,000
Katchiwano Lake		1,000	Tower Lake	3,000
Little Mud Lake		500	Trout Lake	1,250
Little Trout Lake		1,000	Vermilion Lake	1,000
Lovesick Lake		1,200	Thunder Bay:	
			Boulevard Lake	6,000
			Selwyn Lake	3,000
			Shebandowan Lake	3,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1940, to March 31st, 1941—Continued

SMALL-MOUTHED BLACK BASS

—Continued

Timiskaming:	
Bear Lake	500
Beaverhouse Lake	500
Bloom Lake	500
Emerald Lake	500
Hanging Stone River	500
Lake Timagami	500
Sesekinika Lake	1,000
Shanty Lake	500
Victoria:	
Cameron Lake	2,000
Head Lake	2,000
Mud Turtle Lake	2,000
Round Lake	2,000
Wellington:	
Allan's Dam	1,500
Armstrong Dam	2,000
York:	
Lake Simcoe	2,000
Miscellaneous:	
Sales	5,000

YEARLINGS AND ADULTS

Brant:	
Burford Lake	110
Grand River	73
Scotland Pit Pond	100
Hastings:	
Crow Lake	100
Manitoulin:	
Perch Lake	24
Middlesex:	
Sydenham River	107
Muskoka:	
Skeleton Lake	542
Norfolk:	
Waterford Pond	105
Peterborough:	
Belmont Lake	100
Great Lakes:	
North Channel	410

MASKINONGE

FRY

Carleton:	
Ottawa River	25,000
Frontenac:	
St. Lawrence River	20,000
Haldimand:	
Grand River	10,000
Hastings:	
Bay of Quinte	35,000
Beaver Creek	20,000
Crow Lake	20,000
Crow River	20,000
Moir Lake	20,000
Moir River	35,000
Sears Lake	10,000
Stoco Lake	15,000
Tongamong Lake	20,000
Trent River	40,000
Twin Lakes	5,000
Whetstone Lake	10,000
Leeds:	
St. Lawrence River	30,000
Muskoka:	
Kahshe Lake	15,000
Sparrow Lake	20,000
Nipissing:	
Lake Nipissing	30,000
Lake Traverse	5,000
Wolseley Bay	30,000
Northumberland:	
Rice Lake	75,000
Trent River	140,000
Ontario:	
Lake St. John	10,000
Parry Sound:	
Lake Nipissing	20,000
Pickering River	10,000
Peterborough:	
Bald Lake	10,000
Belmont Lake	50,000
Buckhorn Lake	25,000
Chemong Lake	80,000
Clear Lake	80,000
Deer Bay	80,000
Deer Lake	5,000
Gilchrist Bay	20,000
Indian River	15,000
Kashabog Lake	20,000
Katchiwano Lake	120,000
Little Lake	10,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1940, to March 31st, 1941—Continued

MASKINONGE—Continued**Peterborough—Continued**

Little Mud Lake	20,000
Little Trout Lake	50,000
Lovesick Lake	40,000
Otonabee River	40,000
Pigeon Lake	50,000
Rice Lake	20,000
Round Lake	50,000
Sandy Lake	15,000
Stony Lake	250,000
Trent River	20,000
Twin Lake	5,000
White Lake	15,000

Prince Edward:

East Lake	10,000
West Lake	15,000

Renfrew:

Black Bay	10,000
Cory Lake	10,000
Cushene Lake	10,000
James Lake	15,000
Lac du Bois Dur	10,000
Montgomery Lake	15,000
Redbridge Lake	15,000
Stephenson Lake	5,000

Simcoe:

Gloucester Pool	20,000
Lake Simcoe	25,000

Stormont:

St. Lawrence River	20,000
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Sudbury:

French River	20,000
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Thunder Bay:

Lac des Mille Lacs	5,000
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Victoria:

Balsam Lake	40,000
Burnt River	15,000
Cameron Lake	20,000
Dalrymple Lake	15,000
Mud Turtle Lake	15,000
Pigeon Creek	40,000
Pigeon Lake	60,000
Pigeon River	80,000
Scugog Lake	40,000
Scugog River	10,000
Silver Lake	10,000
Young's Lake	10,000

Waterloo:

Nith River	5,000
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FINGERLINGS**Peterborough:**

Belmont Lake	200
Buckhorn Lake	200
Clear Lake	200
Gilchrist Bay	200
Katchawanooka River	200
Rice Lake	200
Searight Bay	23
Stony Lake	510

Simcoe:

Lake Couchiching	200
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Victoria:

Pigeon River	200
Surgeon River	200

PERCH**FRY**

Lake Erie	13,000,000
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PICKEREL**EYED EGGS**

Sparrow Lake	2,000,000
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FRY**Algoma:**

Allan Lake	500,000
Anjigami Lake	1,000,000
Arnill Lake	500,000
Bright Lake	500,000
Canoe Lake	1,000,000
Caribou Lake	500,000
Clear Lake	1,000,000
Crab Lake	100,000
Cummings Lake	500,000
Dean Lake	250,000
Desbarats Lake	1,500,000
Gordon Lake	500,000
Granary Lake	350,000
Keichel Lake	500,000
Lake of the Mountains	150,000
Lauzon Lake	500,000
Lillyget Lake	500,000
Little Basswood Lake	500,000
Little Clear Lake	500,000
Marion Lake	250,000
Mississauga River	500,000
Pipe Lake	500,000
Rock Lake	500,000
Spanish River	500,000
White Lake	500,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

PICKEREL—Continued**Bruce:**

Berry's Lake	750,000
Boat Lake	1,000,000
Chesley Lake	1,000,000
Isaac Lake	1,000,000
Sauble River	1,000,000
Saugeen River	750,000
Seips Lake	300,000
Silver Lake	200,000
Sky Lake	1,000,000
Spry Lake	250,000

Carleton:

Ottawa River	500,000
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Cochrane:

Bigwater Lake	200,000
Bobs Lake	200,000
Nighthawk River	200,000
Round Lake	100,000
Whitefish River	300,000

Frontenac:

Bass Lake	250,000
Big Clear Lake	200,000
Big Gull Lake	700,000
Big Lake	200,000
Bobs Lake	1,950,000
Cross Lake (Kennebec)	700,000
Crotch Lake (Palmerston) ..	500,000
Crow Lake	300,000
Dean Lake	100,000
Fourteen Island Lake	100,000
Green Bay Lake	200,000
Green Lake	500,000
Gull Lake	700,000
Horseshoe Lake	100,000
Kashwakamak Lake	1,850,000
Long Lake (Olden)	250,000
Long Lake (Portland)	450,000
Malcolm Lake	500,000
Marble Lake	200,000
Mazinaw Lake	500,000
McClintock Lake	100,000
Mink Lake	100,000
Mississagagon Lake	750,000
Mississippi River	800,000
Otter Lake	100,000
Red Pine Lake	300,000
Salmon Lake	300,000
Sharbot Lake	500,000
Varty Lake	100,000

Grenville:

Nation River	400,000
Rideau River	1,000,000

Grey:

Mountain Lake	750,000
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Haldimand:

Grand River	1,500,000
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Haliburton:

Cauntaus Lake	500,000
Elephant Lake	1,000,000
Mink Lake	150,000
Otter Lake	250,000
Paudash Lake	1,000,000
Wolf Lake	500,000

Hastings:

Baptiste Lake	800,000
Bow Lake	200,000
Crow Lake	1,000,000
Crow River	200,000
Lime Lake	100,000
Mallard Lake	200,000
Moir Lake	500,000
Moir River	300,000
Rock Lake	500,000
Salmon Trout Lake	100,000
Sears Lake	100,000
Silent Lake	250,000
Tongamong Lake	1,000,000
Trent River	500,000

Kenora:

Andy Lake	250,000
Berry Lake	1,500,000
Blindfold Lake	1,500,000
Bowden Lake	750,000
Clay Lake	750,000
Corner Lake	1,500,000
Eagle Lake	3,000,000
Ely Lake	250,000
Lake of the Woods	58,175,000
Long Bow Lake	1,500,000
Lulu Lake	1,500,000
Marchington Lake	3,000,000
Silver Lake	1,000,000
Vermilion Bay	1,000,000
Wabigoon Lake	1,000,000
Winnipeg River	1,000,000

Lanark:

Barbers Lake	200,000
Bennett Lake	400,000
Black Lake	150,000
Christie Lake	800,000
Dalhousie Lake	500,000
Gillies Lake	200,000
Keatings Lake	100,000
Kerr Lake	500,000
Long Lake	100,000
Mississippi Lake	700,000
Mississippi River	1,300,000
Otty Lake	300,000
Patterson Lake	500,000
Round Lake	200,000
Spectacle Lake	500,000
Whites Lake	450,000

Leeds:

Clear Lake	200,000
Crosby Lake	500,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

PICKEREL—Continued

Leeds—Continued

Devil Lake	250,000
Graham Lake	100,000
Higgley Lake	150,000
Loon Lake	200,000
Opinicon Lake	800,000
St. Lawrence River	1,700,000
Sand Lake	750,000
Traynor Lake	150,000
Upper Rideau	1,000,000
Wolf Lake	500,000

Lennox-Addington:

Beaver Lake	1,000,000
Camel Lake	500,000
Cedar Lake	300,000
Duck Lake	200,000
Long Lake	500,000
Loon Lake	500,000
Mazinaw Lake	600,000
Van's Lake	100,000
White Lake	100,000

Manitoulin:

Burnt Lake	1,000,000
Manitowaning Bay	500,000
Mindemoya Lake	4,000,000
South Bay	500,000
West Bay	1,500,000

Muskoka:

Allen's Lake	300,000
Axel's Lake	150,000
Crooked Lake	750,000
Kabshe Lake	250,000
Lake Muskoka	800,000
Long Lake (McLean)	250,000
Mootes Lake	150,000
Silver Lake	250,000
Six Mile Lake	750,000
Skeleton Lake	250,000

Nipissing:

Beaver Lake	200,000
Bruce Lake	200,000
Cedar Lake	500,000
French River	1,000,000
Kaibuskong Lake	100,000
Lake Champlain	200,000
Lake Nipissing	4,100,000
Lake Timagami	1,000,000
Little Martin Lake	100,000
Lower Twin Lake	200,000
Marion Lake	400,000
Martin Lake	800,000
Martin River	600,000
McPhee Lake	200,000
Moore Lake	250,000
Net Lake	200,000
Nosbonsing Lake	1,000,000
Opechee Lake	150,000

Red Cedar Lake	200,000
Rib Lake	200,000
Talon Lake	500,000
Tilden Lake	200,000
Tomiko Lake	1,000,000
Twin Lake	100,000
Wasaki Lake	200,000
Wasing Lake	200,000
Wickstead Bay	500,000
Wolseley Bay	1,000,000

Northumberland:

Crow Bay	500,000
Crow River	500,000
Rice Lake	1,000,000
Trent River	3,000,000

Ontario:

Lake St. John	1,000,000
Mud Lake	1,000,000
Severn River	1,500,000

Oxford:

Lakeside Lake	1,000,000
Nith River	1,000,000

Parry Sound:

Ahmic Lake	650,000
Barton Lake	200,000
Bass Lake	200,000
Billie Lake	100,000
Burnt Lake	100,000
Cecebe Lake	300,000
Charter Lake	200,000
Clear Lake (Mills)	100,000
Clear Lake (Watts)	200,000
Commanda Lake	250,000
Cranberry Lake	100,000
Crooked Lake	200,000
Doe Lake	600,000
Duck Lake	100,000
Haynes Lake	150,000
Isabella Lake	300,000
Jacks Lake	100,000
Kawigamog Lake	450,000
Lake Joseph	400,000
Lake Nipissing	2,000,000
Lake of Many Islands	100,000
Lake Rosseau	2,700,000
Little Lake Joseph	250,000
Little Long Lake	100,000
Long Lake (Mills)	100,000
Long Lake (Patterson)	200,000
Long Lake (Wilson)	100,000
Loon Bay	500,000
Maganetawan River	450,000
McKeown Lake	100,000
McQuaby Lake	100,000
McVeety Lake	100,000
Memesagamesi Lake	1,100,000
Merrick's Lake	50,000
Mill Lake	200,000
Naiscot Lake	500,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

PICKEREL—Continued

Parry Sound—Continued

Neighick Lake	100,000
Oastler Lake	800,000
Pickereel Lake	250,000
Pickereel River	500,000
Portage Lake	450,000
Rainy Lake	200,000
Restoule Lake	600,000
Ruth Lake	100,000
Ryans Lake	100,000
Sharrows Lake	100,000
Shawanaga Lake	300,000
Shebeshekong Lake	100,000
Shoal Lake	200,000
Silver Lake	100,000
Snakeskin Lake	100,000
Squaw Lake	400,000
Stanley Lake	150,000
Stewarts Lake	200,000
Stormy Lake	100,000
Sucker Lake (Humphrey) ..	300,000
Sucker Lake (Mills)	100,000
Theodelite Lake	100,000
Toad Lake	200,000
Wahwashkesh Lake	1,000,000
Whitestone Lake	300,000
Wilson Lake	150,000
Wolf River	1,500,000
Manitowaba Lake	200,000

Peterborough:

Belmont Lake	1,000,000
Buckhorn Lake	1,000,000
Concession Lake	100,000
Connolly's Lake	500,000
Deer Lake	500,000
Indian River	500,000
Little Cedar Lake	500,000
Little Trout Lake	500,000
Long Lake (Burleigh)	1,000,000
Loon Lake (Chandos)	1,000,000
North River	500,000
Oak Lake	1,000,000
Otonabee River	500,000
Rice Lake	2,000,000
Round Lake	1,000,000
Trent River	1,000,000
Twin Lakes	1,000,000

Prince Edward:

Consecon Lake	300,000
West Lake	300,000

Rainy River:

Clearwater Lake	6,000,000
Lake of the Woods	1,500,000
One-sided Lake	4,500,000
Quill Lake	3,000,000
Rainy Lake	58,000,000
Sabaskong Bay (Lake of the Woods)	15,000,000
Steeprock Lake	2,000,000

Renfrew:

Black Bay	300,000
Calabogie Lake	200,000
Chats Lake	500,000
Constant Lake	250,000
Cushene Lake	100,000
Dempsey's Lake	100,000
Dore Lake	500,000
Golden Lake	500,000
Hardwood Lake	200,000
Hazel Bay	250,000
Hurds Lake	200,000
Jones Lake	100,000
Lafleur Lake	100,000
Madawaska River	400,000
Muskrat Lake	250,000
Norway Lake	450,000
Olmstead Lake	250,000
Otterson Lake	100,000
Petawawa River	500,000
Stephenson Lake	100,000
Sturgeon Lake	250,000
Westmeath Lake	250,000
White Lake (McNab)	500,000
White Lake (Raglan)	250,000
York River	200,000

Russell:

Castor River	1,000,000
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Simcoe:

Gloucester Pool	4,000,000
Little Lake	500,000
North River	2,500,000
Nottawasaga River	600,000
Severn River	2,000,000
Six Mile Lake	750,000

Stormont:

St. Lawrence River	1,600,000
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Sudbury:

Agnew Lake	1,000,000
Cameron Lake	100,000
Charlton Lake	500,000
Clear Lake	100,000
Crooked Lake	250,000
Cutler Lake	250,000
French River	3,000,000
Ivanhoe Lake	500,000
La Cloche Lake	1,000,000
Lake Penage	2,000,000
Long Lake	750,000
Lovering Lake	100,000
Makido Lake	1,000,000
Matagamasi Lake	400,000
McFarlane Lake	200,000
Minisinakwa Lake	1,000,000
Moose Lake	250,000
Nepiwasay Lake	500,000
Richards Lake	200,000
Shanty Bay	1,000,000
Wanapitei Lake	1,000,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

PICKEREL—Continued

Sudbury—Continued		Little Otter	15,000
Whitewater Lake	200,000	Nanticoke Creek	10,000
Thunder Bay:		Unnamed Stream	2,000
Lake Windigoostigwan	500,000	Northumberland:	
Timiskaming:		Bowens Pond	725
Bear Lake	250,000	Peel:	
Beaverhouse Lake	250,000	Credit River	10,000
Blue Lake	200,000	Simcoe:	
Cedar Lake	75,000	Nottawasaga River	40,000
Gillies Lake	75,000	Wellington:	
Granite Lake	75,000	Speed River	10,000
Hound Chute	75,000	York:	
Kenogami Lake	300,000	Humber River	10,000
Lake Timagami	2,000,000		
Net Lake	100,000		
Portage Lake	75,000		
Round Lake	100,000		
Tomiko Lake	75,000		
Twin Lake	100,000		
Victoria Lake	100,000		
Wendigo Lake	250,000		
Victoria:			
Little Turtle Lake	1,000,000		
Mud Turtle Lake	500,000		
Great Lakes:			
Lake Superior	3,000,000		
North Channel	19,000,000		
Lake Huron	23,862,000		

ADULTS

Middlesex:	
Sydenham River	100

BROWN TROUT**FINGERLINGS**

Brant:	
Whiteman's Creek	10,000
Elgin:	
Big Creek	15,000
Grey:	
Potawatami River	10,000
Saugeen River	20,000
Styx River	10,000
Muskoka:	
Indian River	5,000
Kahshe Lake	5,000
Norfolk:	
Big Creek	10,000

YEARLINGS

Brant:	
Scotland Pit Pond	500
Whiteman's Creek	3,600
Bruce:	
Albermarle Creek	1,200
Fladd's Dam	500
Lockerby Creek	3,600
Plum Creek	3,600
Saugeen River	7,250
Snake Creek	1,800
Spring Creek	1,000
Sucker Creek	1,600
Teeswater River	3,600
Vogt's Creek	1,000
Willow Creek	1,600
Cochrane:	
Mattagami River	2,500
Durham:	
Bowmanville Pond	1,500
Ganaraska River	2,000
Mordens Creek	1,500
Rowe's Pond	500
Stephens Creek	1,500
Vanstone's Pond	1,500
Elgin:	
Big Creek	3,600
Deer Creek	500
Little Otter	3,600
Otter Creek	500
Grey:	
Beaver River	1,500
Big Head River	10,800
Lueck's Mill Pond	3,000
Potawatami River	2,700
Sauble River	1,800

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1940, to March 31st, 1941—Continued

BROWN TROUT—Continued		Peterborough:	
Grey—Continued		Deer Bay Creek	8,000
Saugeen River	12,600	Eel's Creek	9,600
Styx River	3,600	Jack's Creek	3,700
Sydenham River	4,400	Mississauga River	7,000
		Mount Pleasant Stream	1,500
Haldimand:		Simcoe:	
Rogers Creek	1,800	Boyne River	3,700
		Nottawasaga River	16,800
Halton:		Willow Creek	3,000
Sixteen Mile Creek	2,000	Waterloo:	
Twelve Mile Creek	13,300	Bridgeport Dam	1,500
Hastings:		Cedar Creek	1,000
Rawdon Creek	3,600	Dentinger Creek	2,200
		Fisher Mill Dam	1,500
Huron:		Gingerich Creek	1,000
Maitland River	9,000	Welland:	
Nine Mile River	3,600	Lyons Creek	8,000
Lambton:		Wellington:	
Bear Creek	1,000	Conestogo River	2,200
		Everton Stream	1,500
Lincoln:		Speed River	6,300
Effingham Stream	1,500	Wentworth:	
Twelve Mile Creek	1,000	Bronte Creek	2,100
Middlesex:		York:	
Caddy Creek	500	Hoover Pond	300
Medway Creek	2,200	Humber River	6,000
Norfolk:			
Big Creek	10,800	LAKE TROUT	
Clear Lake	1,500	EYED EGGS	
Little Otter	3,000	Exchange	575,000
Nanticoke Creek	3,800		
Stony Creek	400		
Venison Creek	1,500		
Northumberland:		FRY	
Cavan Stream	2,700	Frontenac:	
Cole's Pond	500	Big Gull Lake	20,000
Dudley's Pond	250	Brule Lake	5,000
		Buck Lake	20,000
Ontario:		Buckshot Lake	30,000
Chubtown Creek	1,500	Camp Lake	5,000
		Canoe Lake	5,000
Oxford:		Canonto Lake	15,000
Burns Creek	1,000	Chambers Lake	5,000
Horner's Creek	1,000	Crotch Lake	35,000
Peel:		Crow Lake	20,000
Credit River	3,000	Draper Lake	15,000
		Eagle Lake	10,000
Perth:		Granite Lake	5,000
Avon River	2,100	Green Lake	20,000
Halfway House Creek	2,100	Grindstone Lake	10,000
		Kashwakamak Lake	10,000
		Loughborough Lake	15,000
		Mackie Lake	15,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

LAKE TROUT—Continued

Frontenac—Continued

Mississauga Lake	10,000
Palmerston Lake	25,000
Reid's Lake	15,000
Schooner Lake	25,000
Sharbot Lake	30,000

Haliburton:

Deer Lake	5,000
Drag Lake	25,000
Eagle Lake	10,000
East Lake	5,000
Farquhar Lake	10,000
Fishtail Lake	5,000
Hurricane Lake	5,000
Kashagawigamog Lake	10,000
Kushog Lake	10,000
Long Lake	5,000
Moose Lake	10,000
Paudash Lake	5,000
Pine Lake	5,000
Redstone Lake	35,000
Ritchie's Lake	5,000
Spruce Lake	5,000

Hastings:

Baptiste Lake	60,000
Bass Lake	15,000
Big Salmon Lake	10,000
Burnt Lake	3,000
Cedar Lake	10,000
Clear Lake	5,000
Devil Lake	5,000
Dickie Lake	7,000
Eagle Lake	30,000
Gunter Lake	5,000
Jamieson Lake	5,000
Kaministeg Lake	10,000
La Vallee Lake	5,000
Limestone Lake	5,000
Little Salmon Lake	20,000
McKenzie Lake	5,000
Robinson Lake	30,000
Silver Lake	10,000
Trout Lake	5,000
Wadsworth Lake	5,000

Lanark:

Rideau Lake	60,000
Rob's Lake	5,000
Silver Lake	15,000

Leeds:

Charleston Lake	15,000
Indian Lake	20,000
Red Horse Lake	15,000
Wolf Lake	20,000

Lennox-Addington:

Buckshot Lake	30,000
Elbow Lake	15,000

Little Weslemkoon Lake ...	5,000
Loon Lake	60,000
Otter Lake	10,000
Thirty Island Lake	20,000
Weslemkoon Lake	10,000
White Lake	10,000

Peterborough:

Belmont Lake	20,000
Big Cedar Lake	10,000
Bottle Lake	10,000
Catchacoma Lake	25,000
Crystal Lake	10,000
Eagle Lake	30,000
Eel's Lake	30,000
Gold Lake	10,000
Jack's Lake	30,000
Little Cedar Lake	10,000
Long Lake	10,000
Loon Lake (Chandos)	60,000
Mississauga Lake	30,000
Oak Lake	20,000
Sandy Lake	15,000
Trout Lake	30,000
Twin Lake	10,000
Wolf Lake	10,000

Great Lakes:

North Channel	2,654,000
Georgian Bay	960,000
Lake Huron	640,000
Lake Ontario	1,860,000

FINGERLINGS

Algoma:

Achigan Lake	10,000
Axe Lake	5,000
Bass Lake	25,000
Basswood Lake	42,500
Bevins Lake	10,000
Big Clear Lake	10,000
Bull Lake	4,000
Burn Lake	5,000
Canoe Lake	1,000
Caribou Lake	5,000
Carry Lake	3,000
Chiblow Lake	30,000
Clear Lake (Scarfe)	5,000
Clear Lake (188)	5,000
Cobri Lake	5,000
Coffee Lake	7,000
Cummings Lake	15,000
Deep Lake	5,000
Diamond Lake	5,000
Goetz Lake	5,000
Grey Trout Lake	10,000
Hawk Lake	10,000
Hobon Lake	10,000
Howard Lake	10,000
Jobammeghia Lake	3,000
Lake of the Mountains ...	5,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

LAKE TROUT—Continued

Algoma—Continued

Little Chiblow Lake	5,000
Little Pickerel Lake	5,000
Long Lake	15,000
Loon Lake	5,000
Madawonsing Lake	4,000
Matinenda Lake	22,500
Miller Lake	4,000
Moon Lake	7,000
Patton Lake	5,000
Rackey Lake	5,000
Rand Lake	10,000
Ranger Lake	25,000
Raw Hide Lake	35,000
Red Deer Lake	10,000
Robertson Lake	10,000
Sand Lake	10,000
Saymo Lake	15,000
Spruce Lake	10,000
Tookenay Lake	50,000
Trout Lake (Aweres)	5,000
Trout Lake (24-R-62)	10,000
Upper Island Lake	5,000
Wakomata Lake	25,000
White Lake	10,000

Bruce:

Gillies Lake	15,000
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Cochrane:

Bigwater Lake	5,000
Bobs Lake	5,000
Mary Lake	5,000
Nellie Lake	10,000
Perry Lake	6,000
Remi Lake	20,000
Three Nation Lake	5,000
Watabeag Lake	10,000

Haliburton:

Big Bear Lake	10,000
Big Bob Lake	5,000
Boskung Lake	15,000
Bow Lake	5,000
Clear Lake	5,000
Crozier Lake	5,000
Dack's Lake	5,000
Deer Lake	10,000
Farquhar Lake	10,000
Gull Lake	10,000
Haliburton Lake	5,000
Hall's Lake	5,000
Hardwood Lake	5,000
Hollow Lake	35,000
Horseshoe Lake	10,000
Kashagawigamog Lake	15,000
Kimball Lake	5,000
Leaf Lake	5,000
Little Bear Lake	5,000
Little Boskung Lake	5,000
Little Hawk Lake	5,000

Maple Lake	10,000
Moore Lake	5,000
Oblong Lake	5,000
Pine Lake	10,000
St. Nora's Lake	5,000
Stocking Lake	5,000
Stormy Lake	8,000
Twelve Mile Lake	5,000
White Trout Lake	5,000
Wolf Lake	7,000

Kenora:

Blue Lake	25,000
Canyon Lake	30,000
Cedar Bough Lake	5,000
Clearwater Bay (Lake of the Woods)	50,000
Cul de Sac Lake	60,000
Dogtooth Lake	30,000
Dryberry Lake	30,000
Eagle Lake	45,000
Granite Lake	10,000
Lake of Two Mountains	15,000
Little Vermilion Lake	15,000
Mameigwess Lake	11,700
Sturgeon Lake	30,000
Thunder Lake	20,000
Trout Lake	30,000
Vermilion Bay	25,000
Whitefish Bay (Lake of the Woods)	40,000

Manitoulin:

Mantiwaning Bay	12,000
West Bay	12,000

Muskoka:

Bella Lake	5,000
Big Twin Lake	1,000
Clear Lake (Ridout)	10,000
Fairy Lake	5,000
Fox Lake	5,000
Lake of Bays	47,000
Lake Joseph	15,000
Lake Muskoka	25,000
Lake Rosseau	35,000
Long Lake (Cardwell)	5,000
Long Lake (Chaffey)	1,000
Long Lake (Oakley)	5,000
Loon Lake (Sinclair)	5,000
Oxtongue Lake	5,000
Paint Lake	10,000
Peninsula Lake	5,000
Pine Lake	10,000
Rebecca Lake	10,000
Skeleton Lake	20,000
Solitaire Lake	4,000
Stoney Lake	5,000
Surprise Lake	5,000
Vernon Lake	10,000

Nipissing:

Ababika Lake	10,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

LAKE TROUT—Continued	
Nipissing—Continued	
Bear Lake	5,000
Carney Lake	5,000
Cedar Lake	5,000
Cröss Lake	5,000
Diamond Lake	4,000
Dotty Lake	12,000
Fatty Lake	12,000
Herridge Lake	5,000
Jumping Caribou Lake	2,000
Kaibuskong Lake	1,000
Lake Timagami	10,000
Martin Lake	5,000
Moore Lake	5,000
Net Lake	5,000
Noble Lake	5,000
Rib Lake	5,000
Spring Lake	1,000
Talon Lake	5,000
Tomiko Lake	5,000
Wikstead Lake	5,000
Parry Sound:	
Bella Lake	15,000
Big Loon Lake	5,000
Clear Lake	5,000
Eagle Lake	5,000
High Lake	5,000
Horseshoe Lake	5,000
Hughes Lake	5,000
Lake Joseph	10,000
Lake Rosseau	45,000
Little Lake Joseph	5,000
Lorimer Lake	25,000
Memasagamesi Lake	5,000
Otter Lake	10,000
Rankin Lake	5,000
Ruth Lake	5,000
Salmon Lake	5,000
Sand Lake	10,000
Spring Lake	5,000
Sucker Lake	5,000
Tea Lake	5,000
Three-legged Lake	10,000
Trout Lake	15,000
Twenty-eight Lake	5,000
Rainy River:	
Ash Bay (Rainy Lake)	50,000
Bad Vermillion Lake	50,000
Burnt Lake	50,000
Height of Land Lake	30,000
Kakagi Lake	40,000
Loon Lake	15,000
Narrow Lake	70,000
Pipestone Lake	50,000
Rainy Lake	3,900
Steeprock Lake	60,000
Renfrew:	
Bark Lake	20,000
Bergeron Lake	5,000
Blackfish Bay	10,000
Center Lake	10,000
Clear Lake	55,000
Cröss Lake	15,000
Diamond Lake	10,000
Gun Lake	10,000
Long Lake (Radcliffe)	10,000
Pough Lake	15,000
Round Lake (Hagarty)	10,000
Round Lake (Lyell)	15,000
Round Lake (Richards)	10,000
Tea Lake	20,000
Trout Lake	5,000
Wadsworth Lake	10,000
Young Lake	10,000
Simcoe:	
Kempenfeldt Bay	35,000
Lake Simcoe	20,000
Sudbury:	
Baby Lake	5,000
Black Lake	10,000
Cranberry Lake	5,000
Ellis Lake	5,000
Hunter Lake	5,000
Lake Penage	10,000
Lamothe Lake	3,000
Long Lake (Broder)	5,000
Long Lake (Harrow)	4,000
Mesomikenda Lake	16,000
Nelson Lake	3,000
Nepiwasyl Lake	15,000
Racine Lake	10,000
Trout Lake (Cosby)	5,000
Trout Lake (McKim)	5,000
Wanapitef Lake	8,000
Windermere Lake	5,000
Windy Lake	5,000
Thunder Bay:	
Sturgeon River	20,000
Timiskaming:	
Amma Nipissing Lake	20,000
Beauty Lake	5,000
Crystal Lake	10,000
Justine Lake	5,000
Lady Evelyn Lake	20,000
Lake Timagami	100,000
Larder Lake	15,000
Long Lake	5,000
Matachewan Lake	5,000
McLeod Lake	500
Net Lake	5,000
Pine Lake	5,000
Trout Lake	5,000
Twin Lakes	5,000
Wendigo Lake	3,000
Great Lakes:	
Lake Superior	1,060,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940 to March 31st, 1941—Continued.

LAKE TROUT—Continued

Great Lakes—Continued

North Channel	85,000
Georgian Bay	50,000
Lake Huron	3,111,000

RAINBOW TROUT

FINGERLINGS

Algoma:

Basswood Lake	15,000
Batchawana River	7,000
Big Garden River	8,000
Clear Lake	4,000
Deer Lake	2,000
Huston Lake	5,000
Jobameghia Lake	20,000
Keegons Lake	30,000
Loon Lake	10,000
Mississauga River	30,000
Montreal River	46,200
North Lake	10,000
Rainbow Lake	20,000
Serpent River	8,000
Snowshoe Creek	10,000
Thessalon River	30,000
West Lake	15,000

Norfolk:

Unnamed Streams	220
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Sudbury:

Rapid River	10,000
Sandcherry Creek	10,000
Windermere Lake	8,000

YEARLINGS

Bruce:

Sauble River	1,200
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Dufferin:

Nottawasaga River	3,000
Pine River	1,500

Elgin:

St. Thomas City Reservoir	500
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Grey:

Sydenham River	1,200
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Haliburton:

Burnt Lake	1,200
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Peel:

Ponds (Caledon Township)	1,000
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Simcoe:

Kempenfeldt Bay	3,000
Sturgeon River	2,200

Wellington—Trout

Saugeen River	1,200
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York:

Humber River	1,200
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Miscellaneous:

Sales—Demonstration and propagation purposes	2,524
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KAMLOOPS TROUT

YEARLINGS

Bruce:

Gillies Lake	4,000
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Grey:

Bass Lake	4,500
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Muskoka:

Echo Lake	5,000
Red Chalk Lake	4,000
Rill Lake	4,000
Waseosa Lake	2,500

Parry Sound:

Bernard Lake	2,000
Poole Lake	500

ATLANTIC SALMON

FINGERLINGS

Algoma:

Ranger Lake	9,935
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Durham:

Wilmot Creek	2,500
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Frontenac:

Big Clear Lake	5,000
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Simcoe:

Kempenfeldt Bay	13,950
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Sudbury:

Lake Penage	15,000
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SPECKLED TROUT

FINGERLINGS

Algoma:

Achigan Creek	7,000
Alona Bay Creek	7,000
Boundary Lake	14,000
Brown's Creek	2,500
Harmony Creek	3,500
Kashawong Creek	7,000
Lake One	2,500
Lake Two	2,500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Algoma—Continued

Leslie Lake	7,000
Little White River	14,000
Loon Lake (Deroche)	7,000
McCrea Creek	3,500
Mica Bay Creek	7,000
Pancake River	7,000
Richards Creek	3,500
Two Tree River	3,500
Williams Creek	7,000
Woods Creek	7,000

Durham:

Beatty Creek	7,500
Carscadden Creek	10,500
Muldreus Creek	9,500
Quantreuil Creek	7,500
Roy Mercer Creek	9,500
Treus Creek	7,500

Grey:

Boyd Lake	20,000
Christie Creek	5,000
Copps Lake	20,000
Cotter Creek	7,000
Craig Creek	7,000
Deer Creek	5,000
Eel Creek	10,000
Harrison Lake	20,000
Kreig Lake	8,000
Louisa Creek	5,000
Louisa Lake	35,000
Murray Creek	6,000
Pine Lake	20,000

Nipissing:

Balsam Creek	7,500
Doran's Creek	7,500
Duschene Creek	6,150
North River	7,500

Northumberland:

Big Creek	15,000
Burnley Creek	46,000
Dartford Creek	25,000
Dawson Creek	36,000
DeLong Creek	26,000
Heffernan Creek	10,000
Hortop-Prentice Stream	10,000
Little Cole Creek	15,000
Mills Creek	3,000
O'Grady Creek	20,000
Quinn Creek	6,000
Robin Creek	3,500
Sandy Flats Creek	20,525
Valleau Creek	5,000
West's Creek	5,000

Thunder Bay:

Hensis Lake	2,000
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Miscellaneous:

Sales—Demonstration and propagation purposes ...	2,200
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YEARLINGS

Algoma:

Achigan Lake	4,800
Agawa River	9,600
Alva Lake	1,600
Anjigami Creek	1,600
Aubinadong Bay	3,000
Aubinadong Lake	1,500
Ausburn Lake	1,200
Baker Lake	3,200
Batchawana River	19,200
Beaver Lake (Parkinson) ..	600
Beaver Lake (#2 Tp.)	1,600
Black Lake	1,200
Blue Lake	1,400
Blueberry Lake	1,200
Boyles Creek	1,200
Bridge Lake	1,500
Bulgers Lake	2,400
Bull Lake	1,000
Burns Lake	3,000
Burrough Lake	2,400
Caldwell Lake	800
Camp 2 Lake	2,400
Camp 8 River	3,200
Camp 23 Lake	2,000
Canoe Lake	1,200
Caribou Lake	2,500
Carpenter Lake	4,800
Cedar Creek	2,400
Chiblow River	1,600
Chippewa Creek	31,600
Clear Lake	1,800
Copp Lake	3,200
Cotton Creek	1,000
Crystal Lake	600
Cummings Lake	600
Darriel Lake	1,600
Deer Lake	1,500
Devils Lake	1,200
Dougal Lake	4,800
Driving Creek	3,000
Dunns Creek	3,000
Echo Lake (Grasett)	2,400
Echo Lake (R. 62)	1,350
Eleven Mile Creek	2,400
Elizabeth Lake	1,200
Fern Lake	4,800
Fish Lake	2,300
Foot Lake	1,600
Grassy Lake	1,200
Hamburg Creek	1,600
Harmony Creek	2,700
Harris Creek	800
Hawk Lake	2,400
Hayden Lake	2,400
Herman Lake	4,800
Hidden Portage Lake	4,800

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued**Algoma—Continued**

High Bank Lake	1,400	Reserve Lake	1,500
Hoath Lake	1,600	Robertson Lake	3,200
Hobon Lake	4,800	Rock Lake (Aweres)	2,000
Horn Lake	1,600	Rock Lake (Wells)	1,200
Horseshoe Lake (1 C.)	1,200	Rock Lake (168)	1,200
Horseshoe Lake (R. 62)	1,350	Root River	600
Hubert Lake	4,800	Rose Marie Lake	2,400
Island Lake (McMahon)	3,200	Round Lake (Grasett)	1,200
Island Lake (R. 176)	3,000	Round Lake (Whitman)	2,400
Jewel Lake	1,600	Round Lake (1 A.)	1,600
Jimmie Lake	3,200	Sand Lake Creek	4,800
Jobammeghia Lake	4,800	Sand River	2,400
Karkowan Creek	1,200	Sauble Lake	4,000
Kendogami River	7,200	Sausabic Lake	1,200
Lafoe Creek	2,400	Saymo Lake	4,500
Lake One	500	Scarbo Lake	1,200
Little Thessalon River	2,400	Sharp Sand River	2,400
Little White River	2,400	Shumka Lake	1,200
Lonely Lake	1,200	Snowshow Creek (188)	1,600
Long Lake (McDonald)	1,200	Speckled Trout Creek	2,400
Long Lake (R. 168)	1,200	Speckled Trout Lake (1 A.) ..	4,800
Loon Lake (Near Thessalon) ..	3,200	Speckled Trout Lake	
Loon Lake (24 R. 13)	1,600	(28-R-14)	3,200
Loon Lake (R. 62)	1,250	Speckled Trout Lake (176) ..	1,500
Loonskin Lake	4,000	Spring Creek	1,600
Lower Pine Lake	2,500	Spring Lake (1 F.)	1,500
Mader Lake	2,400	Spruce Lake	4,800
Mashagama Lake	2,400	Stokely Creek	5,400
Matinenda Lake	1,800	Tamarack Lake	2,400
Maude Lake	1,200	Tawabinasay Lake	4,800
Maunshe Megoose Lake	3,200	Tea Lake (near Thessalon) ..	3,200
McCormick Lake	2,400	Tea Lake (1 A.)	800
McKinnon Creek	3,000	Thessalon River	4,800
McVeigh Creek	2,400	Tookenay Lake	2,500
Merchants Lake	2,500	Triple Lake	1,600
Michipicoten River	9,600	Trout Lake (Aweres)	1,200
Mill 58 Lake	1,200	Trout Lake (25 R. 14)	2,400
Mileage 48 Lake	300	Trout Lake Inlet	100
Mongoose Lake	4,800	Twin Lakes (Deroche)	1,200
Montreal River	2,400	Twin Lakes (1 B.)	2,000
Moore's Lake	2,400	Twin Lakes (176)	3,000
Moose Lake (Wells)	1,000	Two Dollar Lake	800
Moose Lake (25 R. 13)	4,800	Upper Pine Lake	3,300
Mountain Lake (Aberdeen) ..	1,600	Upper Silver Creek	500
Mountain Lake (Gould)	1,600	Wallace Lake	800
Mud Lake	1,600	Wawa Lake	4,800
Newcomb Lake	3,750	Wartz Lake	4,800
Odowbi Lake	1,600	White Creek	1,700
Osborne Creek	4,800	White River (2 A-1 B.)	4,000
Pine Lake (25 R. 13)	1,600	White River (176)	3,000
Pinkney Lake	2,400	Wolf Lake	900
Pond Lake	1,200	Wonashin Lake	2,400
Prospect Lake	3,200	Woods Creek	1,500
Rand Lake	1,600		
Ranger Lake	500	Brant:	
Rapid River	2,400	Mill Pond	500
Reception Lake	2,400	Scotland Creek	500
Red Deer Lake	1,000		
Red Rock Lake	1,200	Bruce:	
Reed's Creek	1,200	Angle Creek	900
		Crowes Creek	900
		Falconer's Creek	200
		Formosa Pond	100

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Bruce—Continued	
Judge's Creek	2,700
Mullin's Pond	1,200
Nine Mile Creek	1,400
Silver Creek	3,000
Spring Creek (Avon)	100
Spring Creek (Carrick)	1,500
Vogt's Creek	600

Cochrane:

Bobs Lake	500
Bristol Creek	2,000
Croft Creek	1,000
Crooked Creek	1,000
Dandurant Creek	1,000
Elesco Lake	500
Fakey Lake	500
Fulham Creek	1,000
Grassy River	1,000
Groves Lake	500
Halfway Creek	1,000
Hersey Lake	500
Hooker Creek	1,000
Horseshoe Lake	1,000
Jacob Creek	500
Jean Lake	500
Lake of Bays	1,000
Legare Creek	2,000
Liniment Lake	1,000
Little Paradise Creek	1,000
MacDonald Lake	1,000
Mountjoy Creek	1,000
Munro Lake	1,000
Nellie Lake	1,000
Red Sucker River	1,000
Round Lake	500
Rowley Creek	1,000
Smallspot Creek	500
Watabeag Lake	1,000
Water Hen Creek	2,000
Waterworks Creek	1,000
Unnamed Lake (Mountjoy)	500
Unnamed Lake (Tisdale Tp.)	1,000

Dufferin:

Credit River	5,600
McAllister's Spring Creek	400
Nottawasaga River	2,200
Power House Stream	300

Durham:

Cameron Creek	3,000
DeLong Stream	600
Garden Hill Creek	1,000
Lang Creek	600
Luxton Creek	1,000
McGill Creek	1,200
McLaughlin Creek	2,300
Mercer Creek	2,100
Miller Creek	1,650
Orono Creek	1,200

Robbins Creek	1,200
Smith Creek	1,000
Sowden Creek	600
Sowper Stream	600
Squirrel Creek	2,800
Thompson Creek	600
Tyrone Creek	2,550
Unnamed streams in Manvers and Darlington townships	4,850
Virtues Creek	800

Frontenac:

Black Creek	1,200
Camp Lake	800
Chambers Lake	3,200
Grindstone Lake	1,600
Little Mississippi Creek	2,400
Lucky Lake	1,600
Mackie Lake	1,600
McCausland Lake	9,600
Reid Lake	1,600
Rock Lake	2,600
Sand Lake	1,600
Schooner Lake	2,400
Sharbot Creek	3,000
Star Lake	2,400
Trout Lake	3,200
Unnamed lakes in Miller township	1,000

Grey:

Bass Lake	1,000
Beatty Saugeen River	3,600
Beaver River	10,000
Bell Lake	1,200
Big Head River	7,200
Black's Beach	1,000
Black Creek	1,800
Boyd Lake	3,600
Boyne River	1,600
Camp Creek	1,800
Caseman Creek	1,800
Christie Creek	600
Christie Lake	2,600
Colter Creek	600
Comber Creek	1,800
Craig Creek	300
Cullen Lake	400
Deer Creek	3,600
El Creek	1,800
Ferguson Creek	450
Firth Creek	2,000
Gleason Creek	2,700
Harbottle Creek	650
Hayward Falls	1,500
Hydro Creek	8,400
Lamont Creek	1,000
Lawrence Creek	1,450
Louise Creek	1,600
Lueck's Mill Pond	1,800
MacLean's Lake	500
Manx River	1,800
McConnell Creek	1,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
(April 1st-1940; to March 31st, 1941—Continued)

SPECKLED TROUT—Continued

Grey—Continued

McGowan Dam	1,800
Meino Stream	1,800
Mitchell Pond	500
Munshaw Lake	400
Murray Creek	300
North Louise Lake	200
Nuhn Pond	400
Oxenden Creek	2,400
Priddle Spring Creek	1,800
Rocky Saugeen River	13,800
Saugeen River	15,000
Spey River	1,800
Spring Creek	1,000
Styx River	1,800
Sydenham River	20,800
Tannery Creek	1,000
Williams Lake	3,400
Youngs Lake	2,200

Haliburton:

Bear Creek	1,200
Blue Lake	600
Burnt River	1,800
Clear Lake	3,600
Cranberry Lake	600
Crozier Lake	2,400
Drag River	1,200
Eagle Lake River	600
East Lake	3,600
Fletcher Lake	3,000
Fraser Lake	500
Glidden Creek	600
Gun Lake	1,200
Harvey Lake	600
Hawk River	1,800
Holland Creek	1,200
Hollow Lake	3,600
Hollow River	1,200
Jean Lake	1,200
Kawagama Lake	7,200
Kimball Lake	200
McCue Creek	1,800
McKenzie Lake	500
Millichamp Lake	1,200
Mountain Lake tributaries	1,200
Oblong River	1,200
Otter Lake	1,200
Oxtongue Lake	2,400
Penn Lake	2,000
Pine Lake	3,600
Raven Lake	1,800
Redstone River	2,400
Round Lake	1,800
Slipper Lake	600
Stormy Creek	600
Twin Lakes	600

Hastings:

Baptiste Lake	8,800
Barrager Lake	2,000

Bartlett Creek	1,200
Bob Whyte Lake	800
Brett Lake	2,400
Buck Lake	1,600
Byers Lake	1,600
Cannon Lake	2,800
Canoe Lake	1,600
Cockburn Creek	1,600
Deer River	8,000
Devil Lake	1,600
Diamond Lake	8,000
Douglas Creek	4,800
Echo Lake	1,000
Egan Creek	7,600
Fraser Creek	1,600
Fraser Lake	1,600
Geen Creek	1,200
Goudy Creek	4,800
Green Lake	3,000
Hineses Lake	1,600
Jardison Lake	1,200
Little Lighthouse Lake	1,200
Little Mississippi River	4,800
Long Lake (Bangor)	3,000
Long Lake (Hershel)	800
Mud Lake	1,200
Mud Turtle Lake	1,600
Oxbow Lake	2,000
Papineau Creek	3,000
Potter Lake	1,600
Rainy Lake	1,500
Rawdon Creek	4,600
Roses Lake	1,000
Shire Creek	6,800
Silent Lake	6,000
Silver Lake	2,400
Squire Creek	4,800
Stoney Lake	2,400
Tea Lake	800
Vaders Lake	1,600
Williams Lake	2,000
Yates Lake	1,000

Huron:

Armstrong Drain Creek	350
Belgrave Creek	1,800
Bolt Drain Creek	200
Maitland River	900
Middleton Creek	1,200
Murray Creek	1,500
Shedden Creek	1,300
Spring Creek	200
Unnamed streams in Wawa-	
nosh and Turnberry	
townships	1,150
Young Creek	200

Kenora:

Cedar Bough Lake	2,500
Dryberry River	2,000
Little Vermilion Lake	4,500
Silver Lake	2,500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Lanark:		Beaver Creek	3,600
Bottle Lake	500	Bella Lake	7,200
Craig Creek	750	Big East Lake	3,600
Green Lake Creek	750	Big East River	32,600
Long Sue Creek	1,500	Bird Lake	3,600
Paul Creek	3,200	Black River	7,200
Leeds:		Buck Lake and tributaries ..	7,200
Camden Lake	600	Clear Lake (Oakley)	2,400
Lennox-Addington:		Clear Lake (Ridout)	3,200
Bear Creek	1,000	Clear Lake (Sinclair)	2,400
Beaver Creek	4,800	Coopers Lake	3,600
Brown Lake	3,600	Daley Creek	1,800
Buckshot Creek	2,400	Deep Lake	1,800
Burns Lake	2,400	Dog Lake	1,800
Conner Lake	2,400	Dotty Lake	1,800
Copeland Lake	2,400	Eastails Lake	1,200
Dafoe Lake	2,400	Echo Lake	13,200
East Lake	2,400	Fairy Lake and tributaries ..	13,200
Feeny's Lake	1,000	Fox Lake and tributaries ..	10,000
Flake Lake	800	Fraser Lake	800
Green Lake	5,400	Gull Lake	3,200
Hyde Creek	3,200	Heck Lake	3,600
Kilborn Lake	1,600	Helva Lake	1,800
King Lake	4,800	Island Lake	1,600
Leather-root Lake	800	Jessops Creek	1,800
Long Lake (Abinger)	600	Lake of Bays	9,000
Long Lake (Ashby)	2,400	Little East River	23,200
Long Lake (Effingham) ..	1,200	Long Lake (Cardwell)	2,400
MacKenzie Lake	1,200	Long Lake (Chaffey)	1,800
Mallory Lake	1,600	Long Lake (Ridout)	1,600
Ratten Lake	4,800	Loon Lake	3,600
Rock Lake (Abinger)	1,600	Loon Lake Creek	3,600
Rock Lake (Denbigh)	800	Loon Lake Outlet	1,800
Rock Lake (Effingham) ..	2,400	Martin Lake	2,400
Roses Lake	800	Mud Lake	1,800
Shiner Creek	1,200	Muskoka River	26,400
Smith Lake	2,400	Muskoka River Bay	3,200
Snake Creek	3,000	Penfold Lake and tributaries	3,600
Thirty Island Lake	2,400	Peninsula Lake and	
Twin Lakes	600	tributaries	19,600
White Lake	4,800	Pine Lake	2,400
Manitoulin:		Poverty Lake	1,800
Badgerow Creek	6,000	Rat Lake	3,600
Barr Creek	3,000	Rebecca Lake	7,200
Blue Jay Creek	25,000	Red Chalk Lake	6,000
Bonnie Doone Creek	2,000	Rill Lake	4,800
Eighteen Lake	2,000	Rosseau Lake Bay	1,200
Hare Creek	1,000	Shoe Lake	3,200
Kagawong River	1,000	Skeleton Lake	6,200
Manitou River	25,000	Skeleton River	4,000
Mindemoya River	20,000	Solitaire Lake	3,600
Norton Creek	7,000	Split Rock Lake	1,800
Silver Creek	6,000	Spring Lake	2,400
Spring Bay Creek	9,000	Three Mile Lake Creek	800
Srigley Creek	5,000	Turtle Lake	3,600
Muskoka:		Vernon Lake and tributaries	19,600
Axe Creek	3,600	Waseosa Lake	3,600
		Wolf Lake	2,400
		Nipissing:	
		Acanthus Lake	1,000
		Baby Joe Lake	500
		Beaver Lake	350
		Big Balsam Lake	1,500

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Nipissing—Continued

Big Mink Lake	1,400
Big Spring Lake	3,500
Birch Lake	250
Blue Lake	1,500
Blueberry Lake	2,100
Bonanza Lake	250
Bonnechere River	1,000
Brock River	1,200
Broom Lake	1,000
Brule Lake	500
Buck Lake	500
Burnt Island Lake	2,000
Cache Lake	3,000
Camp Lake	1,200
Canisbay Lake	500
Canoe Lake (Peck)	2,000
Canoe Lake (Widdifield)	1,400
Carcajou Lake	500
Carney Lake	1,500
Cauchon Lake	850
Cedar Lake	1,000
Clear Lake (Boulter)	1,000
Clear Lake (Chambers)	1,000
Clear Lake (Gladman)	1,400
Clear Lake (Notman)	1,400
Clearwater Lake (Pentland)	1,000
Coon Lake	500
Crooked Lake	2,800
Cutler Lake	2,100
Daly Lake	500
Desrochers Lake	250
Devils Lake	1,000
Duchesne Creek	1,500
Eighty Acre Lake	1,500
Ethel Lake	2,100
Eva Lake	1,400
Finlayson Lake	3,500
Four Mile Creek	7,000
Fourney Lake	2,400
Galeairy Lake	2,000
Gauthier Lake	1,000
Gilmour Lake	1,000
Gooderham Lake	3,500
Grand Lake	1,000
Green Lake	500
Head Lake	500
Jacks Lake	250
James Creek	1,500
Jimmie Lake	1,200
Jocko River	7,500
Joe Lake	1,000
Kioshkoqui Lake	1,000
Koko Lake	7,750
L'Amable Creek	500
Latrey Lake	3,500
Laveille Creek	500
Little Island Lake	1,000
Little Madawaska Lake	500
Little McAuley Lake	500
Little Mink Lake	1,400
Little Otter Lake	1,400

Little Trout Lake	250
Long Lake	2,000
Long Spur Lake	250
Madawaska River	500
Magee Creek	1,200
McIntosh Lake	1,500
Moon Lake	3,000
Moose Lake	1,000
Mosquito Creek	3,000
Mountain Lake	1,000
Muskosung Lake Stream	100
Noble Creek	350
North Lake	750
North River	6,507
Opeongo Lake	3,000
Opinicon Creek	3,500
Oxtongue River	3,000
Petawawa River	500
Price Lake	3,500
Ravineau Lake	500
Robitaille Lake	500
Round Lake	500
St. Andrew Lake	1,000
Shanty Lake	1,000
Shirley Lake	500
Snake Lake	2,000
Source Lake	1,000
South Tea Lake	1,000
Speckled Trout Lake	500
Spring Lake (Gooderham)	2,100
Spring Lake (Sisk)	3,000
Sproule Lake	250
Stoney Creek	1,400
Sundash Lake	250
Sunday Lake	250
Tanamakoon Lake	1,000
Trout Lake (Parkman)	2,700
Turtle Lake	1,000
Twenty Minute Lake	5,100
Two Rivers Lake	2,000
Unnamed Lake (Niven)	250
Unnamed Lake (White)	250
Welcome Lake	1,000
Whitefish Lake	1,000

Norfolk:

Kent Creek	1,200
Mineral Creek	500
Trout Creek	600

Northumberland:

Baltimore Creek	4,900
Burnley Creek	2,400
Cavan Stream	8,600
Chidley Creek	1,300
Dartford Creek	1,600
Dawson Creek	3,000
DeLong Creek	800
Duncan Creek	800
Lakeport Creek	1,500
Mill Creek	800
Mount Pleasant Stream	4,200
O'Grady Creek	2,400

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Northumberland—Continued		Maganetawan River	14,100
Pegman Creek	3,400	McCullough Creek	2,800
Quinn Creek	1,600	McQuoid Lake	1,000
Robin Creek	800	Otter Lake	1,400
Sandy Flats Creek	1,600	Owl Lake	500
Valleau Creek	800	Paisley Lake	1,400
		Poole Lake	1,400
		Ragged Creek	1,500
		Rat Lake	1,250
		Rock Lake	1,200
		Round Lake	500
		Roussell Creek	800
		Sand Lake (Ballantyne) ...	700
		Sand Lake (Proudfoot) ...	1,500
		Seguin River	1,500
		Shadow River	1,200
		Shells Lake	500
		Smith Creek	2,800
		Stewart Creek	1,000
		Stirling River	2,400
		Surprise Lake	2,500
		Tee Lake Creek	500
		Three Mile Creek	500
		Three Mile Lake	1,900
		Williams Lake	1,500
Ontario:			
Bickle Creek	1,500		
Black Creek	600		
Elgin Park Pond	600		
McLean Creek	1,000		
Thompson's Spring Creek ..	2,000		
Parry Sound:			
Barrett Creek	3,000		
Barton Creek	2,800		
Bernard Lake	2,800		
Big Clam Lake	1,000		
Big Loon Lake	1,500		
Black Creek (Gurd)	1,000		
Black Creek (Strong)	1,400		
Black Lake	3,600		
Bradford Creek	1,000		
Cacheman Creek	1,500		
Cheer Lake	1,400		
Clear Lake (Armour)	900		
Clear Lake (Laurier)	1,000		
Clear Lake (Perry)	1,000		
Clear Lake Creek	500		
Crozier Lake	1,000		
Cummings Lake	1,000		
Darlington Lake	1,000		
Deer Lake	1,250		
Deer Lake Creek	500		
Depot Creek	1,400		
Distress River	2,800		
Eagle Lake	2,800		
East Creek	1,200		
Edgecombe Creek	1,400		
Fagan Creek	1,300		
Fisher Lake	1,500		
Fleming Lake	1,400		
Forest Lake	1,400		
Forsythe Lake	500		
Franks Lake	500		
Genesee Lake	3,000		
Gull Lake	2,100		
Ham Lake	2,800		
Hammel Creek	500		
Happy Lake Creek	1,200		
Horn Lake	1,000		
Island Lake Creek	1,000		
Jack's Lake Creek	1,000		
James Creek	2,000		
Jordon Creek	2,000		
Little Lake	500		
Little Pickerel Lake	2,500		
Long Lake (Perry)	5,800		
Lynx Lake	1,000		
Madill Creek	500		
		Peel:	
		Credit River	6,200
		Smith Creek	1,200
		Watson Creek	1,200
		Perth:	
		Avon River	1,500
		Fullerton Creek	500
		McKnight Stream	1,500
		Peterborough:	
		Archer Creek	200
		Big Ouse River	8,400
		Birdsall Creek	3,200
		Buchanan Creek	3,200
		Carvers Creek	2,800
		Cavan Stream	8,000
		Deer Bay Creek	3,200
		Deer River	1,200
		Dunbar Creek	1,600
		Eel Creek	8,600
		Harding's Creek	800
		Jack's Creek	3,200
		Little Ouse River	5,400
		Millbrook Stream	1,000
		Mississauga River	6,400
		Mount Pleasant Stream ...	3,200
		Plateau Creek	8,250
		Sophies Creek	1,000
		Renfrew:	
		Angling Lake	800
		Annie Lake	1,500
		Barry Lake	800
		Battery Lake	500
		Bear Lake	2,500
		Belanger Lake	800

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Renfrew—Continued

Bergeron Lake	1,000
Big Round Lake	1,000
Bissett Creek	3,000
Black Lake	2,000
Black Donald Lake	1,000
Brennan Creek	1,000
Burns Lake	3,000
Byers Creek	3,000
Clarkes Creek	1,000
Cochrane Creek	4,200
Colton Creek (Admaston) ..	500
Colton Lake	3,500
Constant Creek	1,500
Costello Creek	1,000
Coulton Creek (Matawatchan)	1,500
Cranberry Lake	1,000
Crooked Lake Creek	1,000
Cross Lake	3,000
Crotch Lake	1,000
Crozier Creek	3,500
Deer Lake	1,500
Deux Rivieres Creek	1,500
Devils Lake Creek	1,000
Diamond Lake Creek	1,000
Dodge Lake	500
Dominic Lake	2,000
Elmer Lake	800
Finley Creek	1,000
Gardez Pieds Creek	1,000
Geen Lake	1,000
Grant Creek	1,250
Greenan Lake	1,500
Hamwolds Creek	1,000
Hart Lake	1,000
Harvey Creek	1,000
Helmers Lake	1,000
Heney Creek	1,250
Hughey Lake	1,000
Indian River	4,000
Jerry Lake	500
Josie Creek	1,000
Kelly Lake Creek	1,000
Leckie Creek	1,000
Little Madawaska River ..	3,000
Little Mason Lake	200
Little Spring Creek	250
Locksley Creek	1,000
Long Lake (Lyll)	2,000
Long Lake Creek (Griffith)	1,000
MacKay Creek	1,000
Mares Lake	500
McCool Lake	1,000
McDermid Creek	1,000
Nadeau Creek	500
Paugh Lake	3,000
Pichette Creek	500
Quadville Creek	1,000
Red Pine Lake	500
Rockingham Creek	3,000
Rocky Lake	2,500
Round Lake and Creek	1,300

Schaven Lake	500
School Creek	500
Scott Creek	1,000
Siroski Creek	1,200
Smith Creek	1,000
Snake Creek	1,000
Spring Creek	1,000
Stewart Creek	1,000
Sullivan Lake	1,200
Toohy Lake	1,500
Trout Lake (Head)	1,000
Trout Lake (Raglan)	1,000
Tucker Creek	1,200
Turner Creek	1,000
Twin Lakes	4,500
Unnamed Lakes (Vicinity of Griffith)	1,200
Wadsworth Creek	500
Wendigo Lake	3,000
White Lake Creek	250
Wylie Creek	4,000
Zielany Lake	1,500

Simcoe:

Black River	1,000
Boyne River	3,000
Colwell Creek	1,000
Hill Creek	1,000
Mathewson Creek	3,000
Willow Creek	1,500

Sudbury:

Austin Lake	3,000
Awry Creek	10,000
Bailey Creek	15,000
Bertrand Creek	7,500
Clear Lake	15,000
Clearwater Lake Creek	15,000
Cold Spring Creek	10,000
Coniston Creek	17,500
Crystal Lake	5,000
Devil Lake Creek	10,000
Dublin Creek	500
Ella Lake	7,500
Emery Creek	10,000
Fairbank Creek	10,000
Farm Lake	5,000
Fournier Creek	15,000
Fox Lake	1,250
Garson Creek	6,000
Geneva Creek	15,000
Goodwins Lake	4,500
Green Lake	10,000
Hunter Creek	1,000
Johns Creek	30,000
Johnston Creek	10,000
Junction Creek	7,500
Karl Creek	4,000
Landlocked Lake	1,250
McLanders Creek	15,000
McLeod Creek	7,500
Nelson River	8,000
Post Creek	4,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued

Sudbury—Continued

Poulin Creek	15,000
Pumphouse Creek	30,000
Rapid River	15,000
Rock Lake	2,000
Round Lake	500
Round Lake (Borden)	10,000
Sandcherry Creek	10,000
Sauble River	45,000
Second Lake	3,000
Shoal Lake Creek	1,000
Spring Creek	10,000
Sprout Creek	15,000
Storehouse Creek	2,000
Trout Lake	3,000
Trout Lake Creek	6,000
Unnamed Lake (Hoskin Tp.)	2,000
Unnamed Lake (Morgan) ..	17,500
Veuve River	30,000
Waddell Creek	7,500
Wanapitei Lake	10,000
Wavy Creek	10,000
West Lake	2,500
Windy Creek	20,000

Thunder Bay:

Ada Lake	1,000
Alt Lake	2,000
Anderson Lake	3,000
Anne Lake	1,000
Arnold Creek	3,000
Arrow River	4,000
Bass Creek	6,000
Bat Lake	5,000
Bear Lake	1,750
Bear Trap Lake	6,850
Beaver Dam Creek	4,800
Big Duck Lake	3,000
Billy Creek	4,500
Birch Grove Lake	1,500
Bishop Lake	1,500
Blend Creek	4,000
Bluff Lake	2,000
Brule Creek	10,000
Buckaday Lake	3,000
Cavern Creek	1,500
Cavern Lake	2,600
Cedar Creek	25,000
Charlotte Lake	4,800
Coldwater River	20,300
Corbett Creek	5,000
Cousineau Dam	5,000
Couture Lake	1,500
Current River	20,000
Dan's Lake	1,200
Dublin Lake Creek	500
Fall Lake	2,000
Fire Lake	2,000
Firesteel River	5,000
Florence Lake	1,500
Fraser Creek	6,000
Golden Gate Lake	1,000

Grassy Lake	4,000
Gravel River	13,200
Half Moon Lake	3,000
Hay Lake	2,500
Hazelwood Creek	7,000
Hogan Lake	2,000
Hornblende Lake	1,200
Indian Lake	1,000
Inwood Lake	1,250
Island Lake	3,000
Jackpine River	4,000
Jim's Lake	2,000
Kaministiquia Lake	5,000
Knobel Lake	5,100
Krumle Lake	5,800
Langley's Creek	2,000
Le Sarge Lake	2,000
Little Lake	1,200
Little Partridge Lake	2,400
Little Whitefish River	3,000
Loftquist Lake	15,000
Loon Lake	23,000
Lost Lake	2,400
Love Island Lake	1,200
Lower Pass Lake	6,000
Lukinto Lake	2,000
Lynx Lake	1,800
Maggot River	4,400
McIntyre Creek	7,000
McIntyre River	6,000
McKenzie River	4,000
McLean Creek	2,400
McVicar Creek	4,000
Mine Lake	4,200
Mink Lake	3,600
Mirror Lake	3,000
Moose Creek	2,000
Moose Lake	3,500
Mountain Lake	4,000
Neebing River	17,800
Nipigon River	55,600
Nishin Lake	9,650
Oliver Lake	7,000
One Isle Lake	1,000
Ozone Creek	4,750
Park Lake	4,000
Parsons Lake	2,900
Partridge Lake	4,900
Pass Lake	5,000
Peach Lake	4,200
Pearl River	15,000
Pitch Creek	18,400
Rainbow Lake	2,000
Range Lake	1,200
Reed Lake	2,000
Ring Lake	1,000
Ringer Lake	1,000
Rope Lake	4,000
Ross Lake	2,400
Selim River	2,000
Settling Duck Lake	3,000
Shoepack Lake	3,600
Silver Creek	2,000
Silver Islet Creek	2,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1940, to March 31st, 1941—Continued

SPECKLED TROUT—Continued**Thunder Bay—Continued**

Spar Lake	2,000
Spring Creek (Dorion).....	8,700
Spring Lake (Leduc)	7,000
Squaw Creek	4,000
Star Lake	2,000
Stillwater Creek	1,000
Strawberry Creek	7,000
Sturgeon River	2,000
Surprise Lake	4,000
Three Mile Lake	3,000
Tomlinson Lake	1,250
Trout Creek (Lyon)	4,000
Trout Creek (McTavish) ...	700
Trout Creek (Nipigon)	2,000
Trout Lake (Gorham, etc.)..	26,000
Trout Lake (Stirling)	22,000
TuJack Lake	2,000
Twin Lakes	5,500
Uncle Tom's Lake	2,400
Unnamed Creek (Dorion) ..	1,000
Unnamed Lake (Eva)	2,000
Upper Pass Lake	6,000
Wabasta Lake	3,000
Walker Lake	8,150
Whitefish River	8,000
Whitewood Creek	13,600
Wideman Lake	3,000

Timiskaming:

Belle Isle Lake	1,200
Boston Creek	1,000
Butler Lake	1,000
Charlotte Lake	2,000
Crooked Creek	1,000
Crystal Lake (Bayly)	1,500
Crystal Lake (Lebel)	2,000
Emerald Lake	2,400
Fairy Lake	1,000
Gleason Creek	1,200
Graham Creek	1,500
Jean Baptiste Lake	1,000
Largreaves Lake	1,000
Latour Creek	1,200
Leacock Creek	1,000
Little Otter Lake	1,500
Loon Lake	1,200
Mearow Lake	1,000
Moffat Creek	1,000
Mousseau Lake	1,000
Pike Creek	1,200
St. Anthony Creek	1,000
Sink Hole Lake	500
Spring Creek	1,200
Spring Lake	3,000
Stock Lake	2,000
Twin Lakes	3,000
Wabi Creek	1,000
Wapoose Creek	500
Welcome Lake	1,000

Victoria:

Corbin Creek	200
Crego Creek	1,600
Union Creek	1,500

Waterloo:

Bamburg Stream	2,400
Elora Creek	2,000
Erbsville Creek	1,200
Mannheim Creek	600

Wellington:

Bell's Creek	900
Credit River	1,200
Mallot's Creek	500
O'Dwyer's Creek	300
Ospring Creek	600
Saugeen River	1,200
Stanley Park Stream	300

York:

Doan's Pond	300
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Miscellaneous:

Sales—Demonstration and propagation purposes	13,207
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ADULTS**Algoma:**

Garden River	1,000
Heyden Lake	400
Lower Island Lake	350
Root River	4,650
Upper Island Lake	750

WHITEFISH FRY**Kenora:**

Eagle Lake	1,000,000
Portage Bay	2,000,000
Separation Lake	500,000
Lake of the Woods	35,105,000

Manitoulin:

Lake Manitowaning	1,000,000
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Prince Edward:

Bay of Quinte	89,000,000
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Rainy River:

Rainy Lake	28,000,000
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Simcoe:

Lake Simcoe	1,500,000
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Thunder Bay:

Lake Nipigon	500,000
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SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1940, to March 31st, 1941—Continued

WHITEFISH FRY—Continued

Great Lakes:

Lake Superior	15,750,000
North Channel	23,040,000
Georgian Bay	62,322,000
Lake Huron	43,460,000
Lake Erie	91,912,000
Lake Ontario	8,250,000

HERRING FRY

Frontenac:

Brule Lake	300,000
Camp Lake	200,000

Haliburton:

Drag Lake	250,000
Spruce Lake	250,000

Hastings:

Salmon Lake	250,000
Weslemkoon Lake	350,000

Lanark:

Dalhousie Lake	250,000
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Leeds:

Rideau Lake	750,000
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Lennox-Addington:

Little Weslemkoon Lake ...	100,000
Otter Lake	200,000
White Lake	100,000

Peterborough:

Jack's Lake	250,000
Trout Lake	250,000

Prince Edward:

Bay of Quinte	2,900,000
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Simcoe:

Nottawasaga Bay	7,750,000
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Sudbury:

Windy Lake	500,000
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Great Lakes:

North Channel	1,500,000
Georgian Bay	1,000,000
Lake Erie	29,650,000
Lake Ontario	2,250,000

APPENDIX No. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES—1936 TO 1940, INCLUSIVE

	1936	1937	1938	1939	1940
Large-mouthed Black Bass					
Fry	45,000	135,000	57,500	.....	230,000
Fingerlings	8,398	4,120	8,061	1,890	5,500
Yearlings & Adults .....	.....	92	.....	497	152
Small-mouthed Black Bass					
Fry	780,000	1,275,000	804,000	1,386,000	2,512,500
Fingerlings	69,380	141,900	169,800	226,325	449,154
Yearlings & Adults	5,202	5,893	7,738	7,739	1,671
Maskinonge					
Eyed Eggs .....	.....	.....	.....	120,000	.....
Fry	274,000	420,700	2,005,000	2,675,000	2,345,000
Fingerlings .....	.....	.....	.....	1,300	2,333
Perch—Fry	46,080,000	9,150,000	59,150,000	72,360,000	13,000,000
Pickereel (Yellow)					
Eyed Eggs	2,000,000	2,000,000	2,012,500	7,000,000	2,000,000
Fry	300,759,500	263,743,400	271,567,500	327,500,000	393,887,000
Adults .....	.....	.....	.....	.....	100
Pickereel (Blue)					
Fry .....	.....	1,000,000	500,000	.....	.....
Brown Trout					
Fingerlings	147,050	.....	.....	29,954	182,725
Yearlings	7,290	97,484	59,592*	375,070	252,000
Lake Trout					
Eyed Eggs	3,209,400	3,225,000	2,437,000	1,845,850	575,000
Fry	4,165,000	4,667,000	7,665,000	7,236,900	7,564,000
Fingerlings	18,253,244	15,782,350	10,575,200	9,964,400	7,312,100
Atlantic Salmon					
Fry .....	.....	7,200	.....	.....	.....
Fingerlings .....	.....	.....	.....	.....	46,385
Yearlings .....	.....	.....	4,800	.....	.....
Rainbow Trout					
Fingerlings	133,000	105,240	321,600	109,635	298,420
Yearlings	3,507	.....	6,727	23,145	19,724
Adults .....	.....	.....	.....	1,009	.....
Kamloops Trout					
Fingerlings .....	.....	80,000	25,821	105,000	.....
Yearlings .....	.....	.....	.....	.....	26,500
Speckled Trout					
Eyed Eggs	28,600	.....	1,000	.....	.....
Fry	182,000	.....	.....	.....	.....
Fingerlings	1,053,050	384,725	373,314	337,000	611,375
Yearlings	557,270	1,167,073	2,083,538	2,976,559	3,278,114
Adults	6,081	16,150	4,452	6,315	7,150
Whitefish					
Eyed Eggs	112,500	4,000,000	.....	.....	.....
Fry	428,402,000	383,683,900	323,700,500	326,657,000	403,339,000
Herring					
Eyed Eggs .....	.....	30,000	.....	.....	.....
Fry	56,120,000	5,270,000	49,725,000	38,550,000	49,050,000
Miscellaneous .....	.....	3,053	.....	41	.....
TOTALS	862,401,472	696,395,280	733,265,643	799,496,629	886,995,903

* Yearlings and adults

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of
EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	806	4	40	\$ 10,500	147	\$ 71,170	276	\$ 8,843	566,120	\$ 82,817
Lake Superior	398	10	318	54,400	109	43,735	53	3,735	987,964	108,194
North Channel	155	6	111	36,700	48	24,825	47	2,455	528,969	60,430
Georgian Bay	463	16	377	109,500	131	122,860	120	5,392	1,327,250	138,860
Lake Huron	328	15	482	115,400	100	75,040	27	1,377	1,487,200	188,630
Lake St. Clair	125				42	12,025	71	3,605		
Lake Erie	933	41	965	285,300	170	193,435	130	11,415	2,134,951	281,383
Lake Ontario	574				206	107,420	115	4,050	1,250,380	116,369
Southern Inland Waters	238				10	2,107	82	2,783		
Totals	4,020	92	2,293	\$611,800	963	\$652,617	921	\$43,655	8,282,834	\$976,683

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickarel (Blue)	Pickarel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	13,781	1,339,237	163,702	963,885	2,971	1,556,602
Lake Superior	1,201,163	385,024	1,261,211	6,901	5,217	155,136
North Channel	3,480	118,847	354,058	66,166		23,800
Georgian Bay	26,977	887,235	1,334,033	58,447	6	82,586
Lake Huron	148,968	92,403	1,038,776	783	277	214,275
Lake St. Clair		645		24,972	1,500	52,420
Lake Erie	585,062	3,136,556	21	29,642	2,012,345	426,291
Lake Ontario	1,618,219	403,596	187,400	64,309	96,067	4,271
Southern Inland Waters	135	5,074	24,870	1,129		
Totals	3,597,785	6,368,617	4,364,071	1,216,234	2,118,383	2,515,381
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$179,889.25	\$700,547.87	\$480,047.81	\$72,974.04	\$105,919.15	\$276,691.91

No. 3

DEPARTMENT, ONTARIO

the Province of Ontario, for the Year Ending December 31st, 1940.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
...	...	...	45	\$15,610	57	\$1,825	3	\$ 5	3,250	\$505	...	...	124	\$34,010	114	\$12,805	\$237,890
...	...	...	46	15,250	...	...	...	...	3	15	...	...	51	15,450	45	10,755	251,534
...	...	...	52	19,400	...	...	...	...	...	...	...	...	35	8,000	30	11,075	162,885
7	1,200	\$1,075	100	81,490	57	805	1	2	25,223	1,985	...	...	57	16,900	56	31,656	510,525
...	...	...	105	65,200	...	...	...	...	5,405	925	...	...	66	29,925	25	7,738	484,235
42	6,150	3,420	105	10,340	4	600	2	4	3,300	198	...	...	17	6,285	10	3,125	39,602
37	10,300	7,110	650	300,200	10	2,000	8	90	2,300	48	...	...	113	151,935	82	31,500	1,264,416
7	570	545	...	...	391	9,925	17	83	2,100	102	...	...	58	7,030	28	5,210	250,734
45	3,920	6,216	...	...	114	2,725	28	235	600	15	68	\$525	10	700	4	335	15,641
138	22,140	\$18,366	1,103	\$507,490	633	\$17,880	59	\$419	42,182	\$3,593	68	\$525	531	\$270,235	394	\$114,199	\$3,217,462

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
101,942	...	22,504	172,666	6,220	5,506	381,821	3,203	4,734,040	\$462,912.70
4,001	...	900	240,352	...	80	58,920	...	3,318,905	276,721.99
3,752	...	28,417	2,546	6	268	190,744	40	792,124	67,632.12
1,329	...	2,363	102,478	4,192	59,137	100,001	8	2,658,792	271,378.58
4,762	...	265,861	288,418	21,745	17,716	117,233	250	2,211,467	194,404.49
8,130	...	35,101	...	92,113	303,279	316,893	376	835,429	44,833.30
15,947	...	1,993,542	437	129,375	297,573	1,140,237	970	9,767,998	690,052.23
7,280	32,956	117,650	...	90,650	181,680	235,319	101	3,039,498	189,650.20
...	1,722	5,144	...	57,633	254,299	258,697	...	608,703	28,832.57
147,143	34,678	2,471,482	806,897	401,934	1,119,538	2,799,865	4,948	27,966,956	...
.40	.07	.05	.06	.08	.05	.03	1.00	...	...
\$58,857.20	\$2,427.46	\$123,574.10	\$48,413.82	\$32,154.72	\$55,976.90	\$83,995.95	\$4,948.00	...	\$2,226,418.18

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Species	1939 Pounds	1940 Pounds	Increase Pounds	Decrease Pounds
Herring	5,322,226	3,597,785		1,724,441
Whitefish	6,366,973	6,368,617	1,644	.....
Trout	5,075,802	4,364,071		711,731
Pike	1,063,269	1,216,234	152,965	.....
Pickrel Blue	6,157,383	2,118,383		4,039,000
Pickrel Dore	2,389,635	2,515,381	125,746	.....
Sturgeon	215,062	147,143		67,919
Eels	27,329	34,678	7,349	.....
Perch	1,935,375	2,471,482	536,107	.....
Tullibee	547,865	806,897	259,032	.....
Catfish	379,681	401,934	22,253	.....
Carp	1,142,283	1,119,538		22,745
Mixed and Coarse	3,224,019	2,799,865		424,154
Caviare	3,387	4,948	1,561	.....
TOTALS	33,850,289	27,966,956		*5,883,333

* Net Decrease

APPENDIX No. 6

STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO 1940

Species	Quantity Pounds	Price per Pound	Estimated Value
Herring	3,597,785	.05	\$179,889.25
Whitefish	6,368,617	.11	700,547.87
Trout	4,364,071	.11	480,047.81
Pike	1,216,234	.06	72,974.04
Pickrel Blue	2,118,383	.05	105,919.15
Pickrel Dore	2,515,381	.11	276,691.91
Sturgeon	147,143	.40	58,857.20
Eels	34,678	.07	2,427.46
Perch	2,471,482	.05	123,574.10
Tullibee	806,897	.06	48,413.82
Catfish	401,934	.08	32,154.72
Carp	1,119,538	.05	55,976.90
Mixed and Coarse	2,799,865	.03	83,995.95
Caviare	4,948	1.00	4,948.00
TOTALS	27,966,956		\$2,226,418.18

APPENDIX No. 7

ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS OF THE PROVINCE 1921—1940 INCLUSIVE

1921	\$2,656,775.82	1931	\$2,442,703.55
1922	2,807,525.21	1932	2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49
1927	3,229,143.57	1937	2,644,163.49
1928	3,033,944.42	1938	2,573,640.97
1929	3,054,282.02	1939	2,564,516.37
1930	2,539,904.91	1940	2,226,418.18

Thirty-Fifth Annual Report

OF THE

**Game and Fisheries
Department**

1941 - 1942

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1943



ONTARIO

TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 4 3

TO THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Fifth Annual Report of the Game and Fisheries Department of this Province, for the year ended March 31st, 1942.

I have the honour to be,

Your Honour's most obedient servant,

G. D. CONANT,

*Minister in Charge,
Department of Game and Fisheries.*

TORONTO 2,

March 15th, 1943.

THIRTY-FIFTH ANNUAL REPORT

OF THE

Department of Game and Fisheries of Ontario

TO: THE HONOURABLE G. D. CONANT, K.C.,
Prime Minister and Attorney-General,
Minister in Charge,
Department of Game and Fisheries.

SIR:—

I have the honour to submit to you herewith the Thirty-fifth Annual Report of the Department of Game and Fisheries, outlining a summary of the activities of the various Departmental services, and including condensed statistics for the fiscal year ended March 31st, 1942, as well as certain comparative tables.

INTRODUCTORY

The problems involved in providing a successful programme of conservation in connection with the wealth of the wild life natural resources with which this Province has been endowed are many and varied and have been repeatedly emphasized on many opportune occasions. A permanent solution of the existing problems is to a very large extent dependent upon the complete co-operation of every one who is interested in the maintenance and preservation of this valuable heritage. In the early days fish and game were quite abundant in the lakes and streams and in the forests throughout our virgin territory, and the provision of nature for maintaining the supply was sufficiently adequate. However, the process of developing a country does of necessity entail the removal of forests and the clearing of land in connection with the establishment and growth of a very essential agricultural industry, and the damming of rivers for the provision of electrical power necessary for industrial requirements, as well as many other infringements upon the habitat and environment of wild life, and a considerable reduction of this valuable heritage has been the subsequent result. The demand on these resources has continued to grow as their value from an economic and recreational standpoint became more widely known and appreciated. Over a period of years resident hunters and anglers have increased innumerable, and the tourist trade, stimulated and encouraged by the activities of the Department, has in recent years become one of our largest industries.

The policy of protection has recognized the different phases affecting supply and demand and has been developed in an effort to maintain a proper balance. Legislative enactments and regulations have designated specific periods of the year only during which it is lawful to take various species of our more desirable fish and game and restricted the number or quantity of such fish and game which may be taken. Suitable areas have been designated as sanctuaries for game and fish, thus ensuring reproduction and perpetuation therein and in the territory immediately adjacent to such sanctuaries. Small game has been intensively propagated and released for re-stocking purposes, and hundreds of millions of fish are raised artificially in more than a score of fish hatcheries and this production is annually deposited in provincial waters. The game and fish regulations otherwise embody the results of biological and practical experience, and the enforcement of these regulations is provided by a staff of game and fisheries overseers.

The success of this organized effort along the lines of conservation is in proportion to the support and co-operation which is provided and in this connection it is pleasing to note and record the increasing interest being taken by sportsmen, tourist camp operators and guides as is reflected in the many splendid associations which are giving active assistance in implementing the Departmental conservation programme. With a continuation of such co-operation the work and efforts of the Department will undoubtedly prove of lasting benefit to sportsmen in particular and the public generally.

FINANCIAL

The following is a complete table of the revenue collected during the period under review and shows the various sources from which this total was derived and the respective amounts attributable thereto:—

REVENUE FOR THE FISCAL YEAR ENDED MARCH 31st, 1942.

GAME—

Licenses—

Trapping	\$ 45,128.50
Non-Resident Hunting	124,365.00
Deer	94,923.90
Moose	3,278.00
Gun	97,768.84
Dog	6,196.05
Fur Dealers	28,476.00
Fur Farmers	7,244.00
Tanners	170.00
Cold Storage	227.00

\$ 407,777.29

Royalty 130,686.60

\$ 538,463.89

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 87,831.00
Angling	476,519.95

\$ 564,350.95

Sales—Spawn taking 170.07

Royalty 10,279.03

\$ 574,800.05

GENERAL—

Licenses—

Tourist Camps	\$ 7,840.00
Guides	7,690.00

\$ 15,530.00

Fines 21,119.26

Costs Collected (Enforcement of Game Act) 757.96

Sales—Confiscated articles, etc. 27,069.63

Rent 3,113.50

Commission retained by Province on sale of lic. 2,067.24

Miscellaneous 347.76

\$ 70,005.35

Net Ordinary Revenue \$ 1,183,269.29

The amount collected during this period was the largest recorded in any one particular year during the entire existence of the Department, and exceeds by practically \$200,000.00 the revenue of the previous year. It is also \$168,000.00 in excess of the total amount collected in the previous best financial year, i.e. 1939-40, when for the first time our revenue exceeded the one million dollar mark.

One significant fact which merits favourable comment and more than cursory attention is the amount derived from the sale of non-resident angling and hunting licenses. Upon reference to the foregoing statement of revenue it will be noted that the sum derived from these sources totalled \$600,884.95, which is more than fifty per cent of the revenue collected by the Department from all sources during this period, and almost \$132,000.00 in excess of the revenue collected from these sources in the previous fiscal year. By far the greater proportion of this total would result from the sale of such licenses to visitors from the United States, which is an indication of the importance of the tourist trade to the country generally, as this sum would represent but a small percentage of the total funds such visitors would of necessity have to expend for transportation, meals, accommodation and entertainment or recreation additional to hunting and fishing during the period of their visits within the Province. The efforts devoted by the Government to attract visitors to Ontario and thus develop the tourist traffic within the Province were showing substantial dividends, but it is altogether probable that the entry of the United States, on December 8th, 1941, into the present conflict, will undoubtedly be followed by a noticeable retrogression of this traffic due to diminished numbers of American citizens visiting this country for vacation purposes, particularly during the period in which the existing restrictions governing travel and transportation conditions prevail. Other sources from which increased revenue was derived include the fees received from the sale of the various resident licenses required for hunting purposes, from the sale of trapping licenses and from the collection of fur royalties.

The subjoined table will be of interest by reason of the fact that it depicts comparative revenues derived from these sources during the year under review, the two previous fiscal years, and the fiscal year ended March 31st, 1936, the first complete twelve-month period under the present regime:—

Non-resident Licenses	1935-36	1939-40	1940-41	1941-42
Angling	\$ 200,641.65	\$ 391,504.00	\$ 384,675.00	\$ 476,519.75
Hunting	53,080.00	84,590.00	84,265.00	124,365.00
	\$ 253,721.65	\$ 476,094.00	\$ 468,940.00	\$ 600,884.75
Resident Licenses (Hunting)				
Deer	\$ 56,544.05	\$ 81,882.00	\$ 77,469.40	\$ 94,923.90
Moose	2,728.00	2,733.50	2,948.00	3,278.00
Gun	69,635.93	94,882.18	86,527.85	97,768.00
Dog	3,239.35	5,550.00	5,746.10	6,196.05
	\$132,147.33	\$185,047.68	\$172,691.35	\$202,165.95
Trapping Licenses	\$ 28,315.15	\$ 39,772.30	\$ 35,795.50	\$ 45,128.50
Royalty (Fur)	110,884.40*	116,520.40	101,599.18	130,686.60

* No open season for beaver.

Details of expenditures, both ordinary and capital, are in accordance with the following tabulation:—

EXPENDITURE FOR THE FISCAL YEAR ENDED MARCH 31st, 1942.

ORDINARY—

Main Office	\$ 57,091.61
General	3,489.62
Enforcement	217,374.13
Game Animals and Birds	17,809.99
Macdiarmid	2,576.94
Biological and Fish Culture Branch	206,186.84
Grants	5,400.00
Wolf Bounty	40,593.77
Special Warrants,—	
Cost of Living Bonus	\$ 23,768.51
Unemployment Insurance ..	11.67
	<hr/>
	23,780.18
	<hr/>
Total — Ordinary	\$ 574,231.08
Capital	2,531.18
	<hr/>
Total Expenditure	\$ 576,762.26

The complete financial statement for the year shows a very desirable condition in that a surplus of \$606,507.03 was derived from our operations and the statement is by far the best ever submitted by the Department of Game and Fisheries.

As will have been observed the heaviest expenses are those incurred in connection with enforcement for the maintenance of the Field Officers whose duties are to provide patrol service throughout the Province to secure proper and adequate observance of the various provisions of the Game and Fisheries Act and Regulations, as well as those which are incurred to provide the various services of the Biological and Fish Culture Branch under the supervision of which Branch the provincial fish hatcheries are operated.

The increased bounty on wolves which was continued during the year quite possibly encouraged trappers to devote more time and energy to the destruction of this vicious predator which probably accounts for the considerable increase in the number taken and therefore the greater amount necessary to take care of the subsequent applications for the payment of bounty.

Regarding the payment of grants, one of \$2,500.00 was made to the Ontario Fur Breeders' Association to assist this organization in their efforts to develop the industry of fur farming within the Province. Three grants totalling \$1,900.00 were paid to Mr. Jack Miner, Mr. Thomas N. Jones and Miss Edith L. Marsh in appreciation of their efforts to provide sanctuaries for migratory and native birds on their own properties located in the counties of Essex, Elgin and Grey respectively. A grant of \$500.00 was made to Professor W. J. K. Harkness to enable him to continue research work with a view to supplementing the existing practice in fish culture operations, and a grant of \$500.00 was made available to the Ontario Federation of Anglers to be used by them along educational lines, and more particularly with a view to securing better observance of the provisions of the Fisheries Regulations.

Capital expenditures were kept under rigid control and only such sums were expended as were absolutely necessary to maintain present buildings, principally on fish hatchery properties, in a proper state of repair.

The table which follows shows the total revenue, expenditure and surplus from Departmental activities during the present and the six preceding years:—

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$ 683,938.72	\$ 451,041.91	\$ 232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99
1941-42	1,183,269.29	576,762.26	606,507.03

GAME

In the following table information is given regarding the number of hunting licenses of all varieties, both resident and non-resident, which were sold during the period under review as well as a comparison with the totals disposed of in the three previous years:—

	1938-39	1939-40	1940-41	1941-42
Resident Deer	21,762	21,416	20,219	25,225
Resident Deer (Camp)	307	323	310	333
Resident Deer (Farmers)	7,719	7,722	6,486	7,353
Resident Moose	471	497	536	611
Resident Gun	114,580	113,992	97,218	116,622
Non-Resident Deer	1,329	1,492	1,291	2,028
Non-Resident "General"	569	593	755	1,115
Non-Resident Small Game	1,618	1,567	1,377	1,876
Non-Resident Bear (Spring Season)	49	108	161	189

In every instance there was an increase in the number sold in 1941-42 as compared with those sold in the previous year.

Herewith is a summary of conditions as they apply to the various species of game animals and birds which are to be found in Ontario, and which information is compiled from reports submitted by officers of the enforcement service throughout the Province.

DEER:—Throughout the northerly portion of Southern Ontario and in Northern Ontario generally deer continued to be sufficiently plentiful to warrant the statement that the hunting of this species of fine game animal provides a source of relaxation for thousands of interested hunters unequalled by any other division of the sport. The limited extent of the open season and the various restrictions which are in effect during this period of open season, as well as the protection which is provided during that period of the year in which no hunting of deer is permitted, have all contributed in some measure to the maintenance of the deer herds of the Province in their present satisfactory state. Reports from the various counties in Southern Ontario in which an entire closed season has prevailed for many years are to the effect that this complete

protection which has been provided has resulted in a considerable increase in the numbers of these animals which now inhabit many of these areas, though this improvement has not been sufficiently extensive to warrant the provision of general regulations for the hunting of deer in these areas. However, conditions were such in the Counties of Bruce and Carleton that special regulations were promulgated in connection with the hunting of deer therein, details of which are as follows:—

(a) An open season in the County of Bruce, from November 10th to November 18th, 1941, both days inclusive, though the use of dogs during this hunting season was prohibited.

(b) An open season in that part of the County of Carleton lying west of the Rideau River, from November 3rd to November 18th, 1941, both days inclusive. The general regulations which govern the hunting of deer were in effect.

In Division (D), Southern Ontario, a special regulation establishing the period of the open season for deer provided that such open season would extend from November 3rd to November 18th, 1941, both days inclusive.

In accordance with local recommendations received in the Department it was further provided that it would be unlawful for any person to hunt deer in the Counties of Durham, Northumberland and Prince Edward and in the Township of Cambridge, in the County of Russell, at any time during the year 1941, thus eliminating the open season in these areas which is established by the general provisions of the Game and Fisheries Act.

MOOSE:—Generally speaking this species of game animal is not plentiful anywhere in this Province, though there are some areas in which rather favourable conditions do prevail. An entire closed season on these animals has been effective for the past several years in that portion of Ontario lying south of the French and Mattawa Rivers and Lake Nipissing, and this prolonged period of entire protection has not resulted in any general increase in the numbers of moose which exist in this part of the Province, though some slight improvement is reported from the County of Renfrew and the District of Muskoka. Advice from various northern Ontario sections indicates conditions practically similar to those which have existed there in more recent years, with slight improvement in scattered areas. Hunting was permitted during the usual open seasons in accordance with provisions of the Game and Fisheries Act, while a restricted period of open season, extending from October 15th to October 31st, 1941, was provided in that area in northwestern Ontario, west of the Superior Junction-Fort William Branch of the Canadian National Railway, including the district of Rainy River and portions of the districts of Kenora and Thunder Bay, and in that area in the south-eastern part of northern Ontario, lying north of North Bay and east of Sudbury, and including portions of the districts of Nipissing, Temiskaming and Sudbury.

CARIBOU:—But very few specimens of this variety of game animal exist in Ontario at this time. Naturally they are reported only from locations in northern Ontario and in all instances the information received is to the effect that they are very scarce. They are probably most prevalent, though not plentiful even there, on the larger islands in Lake Superior located along the shore fronting the district of Thunder Bay. Existing conditions demand a continuation of the protection of a closed season throughout the entire year, and which has now prevailed for quite a period of years, if this species is to have an opportunity to maintain itself even in its present limited proportions.

ELK:—The elk which are to be found in Ontario at the present time are those which were originally imported by this Department from Western Canada with the co-operation of the National Parks Branch of the Department of Mines and Resources of Canada, and their subsequent off-spring. During the summer of 1941 six of these animals, three

bulls and three cows, were transferred from their range on the Petawawa Crown Game Preserve in the county of Renfrew, and liberated in a suitable area in the county of Peterborough. Little if any improvement was reported from the localities in which elk have been liberated on different occasions in previous years in the counties of Bruce, Simcoe and Peterborough, and in the districts of Nipissing, Sudbury, Algoma and Thunder Bay. These are the only sections in the Province in which these animals are to be observed, in addition to those on the Petawawa Crown Game Preserve.

BUFFALO:—Little change has occurred in the small herd of buffalo, comprised of sixteen heifers and four bulls, which was imported from Alberta in 1939, and placed on lands in the Burwash Crown Game Preserve in the district of Sudbury.

BEAR:—There would appear to have been some increase in the number of black bear in many parts of Ontario. They are reported to be quite numerous in many parts of northern Ontario and in the districts of Parry Sound and Muskoka and the counties of Haliburton and Renfrew. The demand for the pelts of these animals is at present negligible and as a result of this condition there is no encouragement for the trapping of bear. However, much healthy recreation may result from the hunting of these animals, and no doubt many hunters take advantage of the opportunity for sport thus provided. It will be of interest to report that during the spring bear season from April 1st to June 15th, 1941, some one hundred and eighty-nine (189) hunting licenses were issued to non-residents of the Province for the taking of bear, again recording an increase in the number of such licenses issued as compared with those sold during this season in the previous fiscal year.

RABBITS:—The following varieties of rabbits are to be found in different sections of the Province. viz:—cottontail rabbits, European hare (or jack rabbits) and the varying hare (or snowshoe rabbits).

Cottontail rabbits are reported from all southern Ontario counties with the exception of Renfrew, Haliburton, Muskoka and Parry Sound. Generally speaking, conditions as they applied to this variety were very good and some increase was evident. However, conditions were not favourable in several of the eastern counties as well as in the counties of Grey and Bruce.

The European hare, or jack rabbit as it is more familiarly known, is confined to the extreme southwesterly portion of the Province, lying south of the district of Muskoka and the county of Haliburton and west of the county of Hastings. With but few exceptions reports indicated that they were quite plentiful throughout this section.

The varying hare, or snowshoe rabbit, is prevalent in many of the eastern counties and northern districts of southern Ontario and throughout that portion of the Province lying north and west of the French and Mattawa Rivers and Lake Nipissing. They were reported to be not too plentiful in any of these areas except possibly in the far northwestern districts, though a slight general improvement in their numbers was observed.

There is no doubt that the hunting of rabbits is the favourite sport of a large percentage of hunters throughout the Province, particularly in the late fall and early winter, and there are many who participate in the enjoyable and healthy recreation derived from such hunting.

PARTRIDGE:—Satisfactory conditions with reference to both ruffed grouse and sharp-tailed grouse continued to prevail in the areas in which suitable environment exists, more particularly in the northern districts of the Province. The sharp-tailed variety of partridge are the western Canada species and are found in Ontario only in the northwestern districts. Special regulations were adopted to provide for an open season during the fall of 1941, details of which are as follows:—

The general open season consisted of two periods extending from October 4th to October 14th, and from November 3rd to November 12th. Limits of catch provided by the Regulation which governed in this case were not more than five (5) birds per day and not more than twenty-five (25) birds in all during the two periods. This applied throughout the Province except in the counties of Essex and Kent and in the townships established as Regulated Game Preserve Areas. In these areas mentioned in this exception to the general Regulation the dates on which the hunting of partridge was permitted were October 24th, 25th and 29th and November 1st, and the limits of catch were five (5) birds per day.

HUNGARIAN PARTRIDGE:—This species of game bird is not native to the Province. The present stock is the result of importations, principally from central European countries several years ago, and which were later liberated in suitable areas. They are reported to exist, though not at all plentiful, in many southern counties, and small flocks have been observed in isolated and scattered sections of southern Algoma, eastern Thunder Bay and Rainy River. They are possibly more numerous in counties in the extreme southwest and extreme southeast portions of the Province. The open season provided in 1941 was in effect only in the counties of Essex and Kent on October 24th, 25th and 29th and November 1st, and the limits of catch were established at two (2) birds per day.

PHEASANTS:—During the year 1941 the Department undertook the distribution of 21,168 pheasants, comprising 19,684 poults, 1,122 adult hens and 362 adult cocks. These birds were purchased at a cost of \$16,514.85, and were liberated under the supervision of field officers of the Department, 18,259 in the townships established as Regulated Game Preserve Areas and 2,909 in a few counties additional thereto. Following are details of this distribution, and in all cases except as is indicated the birds liberated were poults:—

Regulated Game Preserve Areas:—County of Brant, (three townships,—Burford, South Dumfries and Onondaga), 760 birds; County of Elgin, (five townships,—Aldborough, Bayham, Dorchester South, Dunwich and Malahide), 1,000 birds; County of Haldimand, (ten townships,—Canboro, Dunn, Moulton, Cayuga North, Cayuga South, Oneida, Rainham, Seneca, Sherbrooke and Walpole), 1,263 birds, of which 13 were adults; County of Halton, (four townships,—Esquesing, Nassagaweya, Nelson and Trafalgar), 1,641 birds of which 191 were adults; County of Lambton, (one township,—Plympton), 200 birds; County of Lincoln, (eight townships,—Caistor, Clinton, Gainsboro, Grimsby North, Grimsby South, Grantham, Louth and Niagara), 2,670 birds of which 270 were adults; County of Middlesex, (two townships,—Westminster (part) and Metcalfe), 500 birds; County of Norfolk, (four townships,—Middleton, Townsend, Walsingham and Windham), 640 birds; County of Ontario, (three townships,—Pickering, Whitby East and Whitby West), 750 birds; County of Oxford, (one township,—Dereham), 300 birds; County of Peel, (five townships,—Albion, Caledon, Chinguacousy, Toronto (part) and Toronto Gore), 1,652 birds of which 289 were adults; county of Prince Edward, (one township,—Marysburgh South), 100 birds; County of Welland, (eight townships,—Bertie, Crowland, Humberstone, Pelham, Stamford, Thorold, Wainfleet and Willoughby), 1,800 birds; County of Wellington, (one township,—Puslinch), 300 birds; County of Wentworth, (eight townships,—Ancaster, Barton, Beverley, Binbrook, Glanford, Flamboro East, Flamboro West and Saltfleet), 1,783 birds of which 24 were adults; County of York, (seven townships,—Gwillimbury East, Gwillimbury North, King, Markham, Scarborough, Vaughan and Whitchurch), 2,900 birds, of which 650 were adults.

General:—County of Essex, 1,221 birds,—700 on the mainland and 521 (of which 47 were adults) on Pelee Island; County of Huron, 50 birds; County of Kent, 700 birds; County of Lambton, 25 birds; County of Leeds, 50 birds; County of Northumberland, 213 birds; County of Oxford, 600 birds; and County of Perth, 50 birds.

The Regulations which prescribed the open season for the taking of pheasants in 1941 established October 30th and 31st, and November 7th and 8th as the effective dates on Pelee Island with a limit of catch of five (5) birds per day and a possession limit of ten (10) birds during each of the two two-day periods, with the further provision that in each two-day period hunters could include in their possession limit of ten (10) birds not more than three (3) hen birds conditional upon the payment of \$1.00 each for such hens to the Departmental representative on the Island. In the Township Regulated Game Preserve Areas the dates of this open season were October 24th and 25th, and two additional days, viz:—October 29th and November 1st, provided the municipal authorities in any township issued their special hunting licenses therefor. The limits of catch provided were three (3) cock birds per day. Hunters who participated in this open season on Pelee Island and in the Regulated Game Preserve Areas were required to provide themselves with the special hunting license which the municipal councils were authorized by the Regulations to issue, as well as the hunting license required under the Game and Fisheries Act. In the County of Essex (excluding Pelee Island) and the County of Kent the dates of the open season were October 24th, 25th and 29th and November 1st, with a limit of catch of three (3) cock birds per day.

While in the areas in which the open season prevailed conditions have been conducive to the introduction and successful establishment of this species, and were sufficiently satisfactory to warrant provision of the hunting which was permitted in the fall of 1941, it is quite possible that any future extension which may be contemplated will be restricted to areas in which weather conditions are not too severe. Efforts undertaken by the Department in previous years with a view to securing establishment of these birds in areas immediately to the east and north of the section concerned have not been particularly successful, and while some birds may yet be found in these areas there has not been any noticeable increase in their numbers according to the reports of our field officers stationed therein.

QUAIL:—The only portion of the Province in which these birds are reported to be found in sufficient numbers to assure any measure of success in the hunting of same would appear to be in a few counties in the extreme southwestern end of the Province, though a few isolated small bevvies have been observed in some of the eastern counties. A special open season was provided by Regulation in the counties of Essex (excluding Pelee Island) and Kent on October 24th, 25th and 29th and November 1st, 1941, with a limit of catch of four (4) such birds per day.

DUCKS:—There is every indication that the several varieties of ducks which cross Ontario along the route of their southerly migration during the fall of the year provide a good measure of sport for those who find recreation in the hunting of this species of game bird. They were fairly plentiful and appeared in increased numbers in many areas, particularly those in which favourable feeding conditions exist. The various provisions which govern the hunting of ducks are provided by the Federal Government in co-operation with the various Provinces under the Migratory Birds Convention Act and Regulations. The restrictions which have been in effect in more recent years for the protection of wild ducks have undoubtedly reacted favourably and resulted in creating conditions necessary for the improvement now reported and which has been the objective towards which our efforts have been directed. The present desirable conditions will probably continue providing the existing restrictions are maintained.

GEESE:—This species is of little importance in the general scheme of hunting in Ontario. Conditions remained about the same as has been indicated in Departmental annual reports for the past several years. Successful hunting of wild geese may be enjoyed only along the shores of James Bay, in the far northern end of the Province, and in the extreme southwestern counties. In other sections they are observed only in flight

during the fall and spring migration periods. As in the case of wild ducks the regulations which are authorized for the hunting and protection of wild geese are provided under the Migratory Birds Convention Act.

WOODCOCK:—As a general rule these birds are not very plentiful, and in most sections from which they are reported their numbers are quite limited. The only possible exceptions to this general rule are a few counties along the north shore of Lake Erie and immediately to the north thereof, as well as in some of the counties in the southeastern end of the Province. The Migratory Birds Convention Act governs, and in 1941 the open season extended over a period of only one month, in the northern division from September 20th to October 20th, and in the southern division from October 1st to October 31st. The bag limit was eight (8) per day and not more than one hundred (100) for the season.

SNIBE:—There are but few sections in Ontario in which these birds are found in sufficient number to warrant any extensive hunting of the same, and it is quite probable that not many hunters make any particular effort to take them. This is another species protected by the Migratory Birds Convention Act and Regulations.

POLOVER:—Conditions with respect to these birds are varied, and while unfavourable reports predominate and indicate that a not too satisfactory state generally prevails, there are some sections from which some improvement has been reported. Under the Migratory Birds Convention Act and Regulations plover are provided the protection of an entire closed season.

FUR-BEARING ANIMALS

The following is a summary of conditions which apply to fur-bearing animals throughout the Province, and which information has been prepared from reports submitted by officers of the Field Service Staff:—

BEAVER:—The reports which have been received regarding beaver would indicate that these animals exist in fairly satisfactory numbers throughout Ontario, except in some of the counties situated in the southwestern and southeastern portions of the Province, though a slight increase in their numbers is reported from some of these counties. While the necessity for the present regulations for the protection of this species is apparent, existing conditions did warrant the provision of a short open season with a restricted limit of catch, and the open season provided covered the period from December 1st to December 21st, 1941, and was in effect in that portion of the Province lying north and west of the French and Mattawa Rivers and Lake Nipissing (except the area lying west of the line of the Canadian National Railway from Fort William to Superior Junction and south of the main transcontinental line of the Canadian National Railway from Superior Junction to the Manitoba Boundary), in the districts of Manitoulin, Parry Sound and Muskoka, and that part of the district of Nipissing lying south of the Mattawa River (excluding Algonquin Park), and in the counties of Victoria, Haliburton, Peterborough, Hastings, Lennox and Addington, Frontenac and Renfrew. Under the regulations which governed all persons who trapped beaver during this open season, including farmers trapping on their own lands, were required to secure trapping licenses, and each trapper was authorized to take not more than ten (10) beaver during this open season. Returns received in the Department show that some 25,197 pelts were taken during this period of open season, and it has been estimated that the value of these pelts to the trappers concerned was in excess of \$530,000.00.

FISHER:—The annual catch of these animals is indeed very small. Conditions with reference to this species are not good in any part of Ontario. It is practically extinct in that part of the Province lying south of the French and Mattawa Rivers and Lake Nipissing.

FOX:—The red variety of this species showed a remarkable increase, particularly in southern Ontario during the period covered by this report. As a matter of fact the total catch of 32,215 was more than double the catch of the previous year, and has not been exceeded since the season of 1936-37. This condition resulted in the receipt of many complaints from farmers to the effect that they were losing considerable numbers of their poultry due to the depredations of these predators and which complaints influenced the Department to instruct field officers that no action was to be taken to prevent trappers and hunters from taking foxes for a period of fifteen days following the end of the regular open season, or until March 15th, 1942. This condition also resulted in action by the Municipal Councils of some of the thickly settled townships in the counties of Peel, York and Ontario to provide for the payment of a bounty on foxes which were killed within the limits of such townships. While other varieties of wild fox,—cross, silver or black and white,—are not nearly so numerous as are red fox, a substantial increase in the seasonal catch of each variety was recorded.

LYNX:—In this case there was also an increase recorded in the total catch reported during the year, though the number taken was very small. They are trapped principally in northern Ontario, and while there are reports of their existence in some scattered portions of southern Ontario, in all sections the condition of this species can be described only as extremely scarce.

MARTEN:—As in the case of lynx these animals are extremely scarce and few of this species are found other than in northern Ontario. Some small improvement is reported from the district of Cochrane and the northern portion of the district of Algoma. There was an increase in the season's catch.

MINK:—Conditions as they affected this species showed improvement in practically every section of the Province. While this improvement would no doubt result in a proportional increase in the total catch during the open season which prevailed, to this improvement could not be attributed in its entirety the very substantial increase which was reported. The total catch of 63,996 mink represented an increase in excess of sixty-four per cent as compared with the catch of the previous year. This total has not been exceeded by the take of any one season since 1926. Exceptionally favourable trapping conditions during the period of the open season were unquestionably very largely responsible for this remarkable increase.

MUSKRAT:—It is again possible to report that fairly satisfactory conditions prevailed in respect to muskrat. While there were local increases and declines in the existing numbers of these animals, generally speaking a normal average was maintained as is indicated by the number trapped during the open season which was again provided by Regulation. Different periods of open season were established to coincide with favourable weather conditions in the sections concerned. The principal source of general revenue accruing to licensed trappers is derived from the sale of their muskrat pelts. It has been calculated that trappers received the approximate sum of \$1,445,000.00 from muskrat pelts marketed by them, which was forty-five per cent of the estimated value of the total catch of fur taken during the various open seasons of 1941-42.

OTTER:—This species is not too plentiful in any section of Ontario, though there are a few sections in the northern part of the Province from which improvement has been reported. The number trapped during the open season was about average.

RACCOON:—General conditions with reference to raccoon would appear to be deteriorating. They exist only in the lower section of the Province, and while the annual catch showed an increase when compared with the figure for the previous year, this impression of improvement is not substantiated by the reports of our field officers, the majority of whom advise that conditions are unchanged or that there has been some decrease in their numbers.

SKUNK:—This is a species of fur-bearing animal which continues to experience no difficulty in maintaining itself in practically undiminished numbers. They are reported to be quite plentiful in practically every section of Ontario and there was a considerable increase in the numbers which were taken during the trapping season of 1941-42. They may be taken at any time during the period in which trapping licenses are valid.

WEASEL:—The prevalence of this species varies in different sections. As in the case of skunk they may be taken at any time during the general trapping season. The total catch during the season of 1941-42 was just average, and it is quite possible that the small returns derived from the sale of these pelts did not encourage trappers in their efforts to take these animals.

The following is a comparative table showing the numbers of pelts of the several varieties of fur-bearing animals taken by licensed trappers, and which were either exported or dressed, during the fiscal period covered by this report, as well as similar figures for the three preceding years:—

	1938-39	1939-40	1940-41	1941-42
Bear	363	295	274	384
Beaver	1,366	33,530	21,605	25,197
Fisher	1,467	1,382	858	884
Fox (Cross)	2,164	981	722	1,780
Fox (Red)	22,366	19,925	15,059	32,215
Fox (Silver or Black)	131	101	67	206
Fox (White)	142	36	91	114
Lynx	785	514	383	537
Marten	2,074	1,790	1,439	1,652
Mink	25,111	36,518	38,976	63,996
Muskrat	508,893	689,706	739,224	722,387
Otter	3,764	4,101	3,931	3,880
Raccoon	9,493	14,493	11,973	13,499
Skunk	89,100	74,176	72,005	94,656
Weasel	93,488	95,832	53,719	80,776
Wolverine	3	2	2	3

Some ten thousand licenses were issued by the Department of Game and Fisheries during the 1941-42 season to authorize the trapping of fur-bearing animals, and from reports received by the Department from various licensed fur dealers it has been estimated that such trappers received a total of \$3,170,790.45 for the various pelts taken by them during this trapping season, which is an increase of more than eighteen per cent over the estimated valuation for the previous year. In order of importance the principal sources of this increase were mink, fox, skunk, beaver and weasel.

Pelts taken from animals raised on licensed fur farms, viz:—fox (silver or black, blue and cross), and mink, and disposed of during the year by such fur farm licensees have been estimated to have realized the sum of \$1,036,354.08, a decrease of some \$210 000.00 as compared with the operations of the previous year, making the value of the total fur production of the Province for the year 1941-42 the sum of \$4,207,144.53.

FUR FARMING

The propagation of fur-bearing animals in captivity continued during the year, though these operations were confined principally to mink and foxes. Disturbing in-

fluences such as restricted markets for fur, rising costs of feeds and the uncertainty of supplies, attributable to the state of war in which our country is involved, caused some reduction in the number of fur-farm licenses which were issued during the year, and there was a decrease of some ten thousand, or practically thirty per cent in the number of silver and black fox pelts which were marketed by licensed fur farmers during the year as compared with the number marketed during the previous year. There were 1,613 fur farms licensed during 1941, a reduction of twelve per cent.

The following comparative table shows the total number of animals retained as breeding stock on licensed fur farm premises as at the first day of January in each of the four years included in the comparison:—

	1939	1940	1941	1942
Beaver	2	4	13	18
Fisher	19	27	26	16
Fox (Cross)	197	168	134	112
Fox (Red)	120	96	65	73
Fox (Silver or Black)	22,923	18,327	16,034	15,630
Fox (Blue)	98	209	397	644
Lynx	2	2	2	2
Mink	30,378	31,989	34,277	38,650
Muskrat	267	235	179	119
Raccoon	284	243	139	124
Skunk	6	10	7	5
Marten	15	19	16	19
Otter	0	2	2	0

It has been estimated that this breeding stock as at January 1st, 1942, had a replacement value of \$1,994,815.00.

A compilation of fur records undertaken by the Department shows that licensed fur farmers during the year 1941-42 disposed of the following pelts from stock raised on these establishments, viz:—

63,580 mink, 61,303 of which were exported, and the remaining 2,277 dressed within the Province.

24,410 silver and black fox, 16,466 of which were exported, and the remaining 7,944 dressed within the Province.

524 blue fox, 503 of which were exported, and the remaining 21 dressed within the Province.

164 cross fox, 109 of which were exported, and the remaining 55 dressed within the Province.

CROWN GAME PRESERVES

The various Crown Game Preserves which had existed in the previous year were continued without change in any case either as regards the area involved or the conditions pertaining thereto. Similar comment applies also to the several townships which were previously established as Regulated Game Preserve Areas.

Only one new Crown Game Preserve was established during 1941-42, and this was the Kesagami Beaver and Fur Sanctuary. The area included therein is located in the district of Cochrane lying west of the Ontario-Quebec interprovincial boundary, east of the Moose and the North French Rivers, south of the southern shore of James Bay, and north of the northern boundaries of the townships of Inglis, Swartman, McQuibban, Tweed and Blakelock and the easterly extension thereof to the Ontario-Quebec interprovincial boundary. The regulation which provided for the establishment of this Sanctuary was adopted at the request of the Department of Mines and Resources for Canada, primarily to enable the Department of Game and Fisheries with the co-operation of the Federal Department of Mines and Resources to re-stock the area with beaver during the years specified, control the annual take of beaver therein, if and when such trapping is permitted, and provided a restricted and controlled trapping ground for the benefit of Indian residents in Ontario. The regulation further provides for the trapping in this area by resident Indians only of fur-bearing animals other than beaver. This is the second such Sanctuary now established.

WOLF BOUNTIES

The following is a comparative statement showing annual wolf bounty statistics and payments for a period of five years ending with the 1941-42 fiscal period:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1938	1,022	837	30	1,889	\$27,474.24
For year ending Mar. 31, 1939	1,031	723	41	1,795	25,357.00
For year ending Mar. 31, 1940	1,107	614	22	1,743	25,058.12
For year ending Mar. 31, 1941	738	400	8	1,146	16,477.43
For year ending Mar. 31, 1942	1,199	577	37	1,813	40,593.77

The basic rate of bounty on adult wolves, viz:—\$25.00, which was provided by regulation dated March 1st, 1941, was in effect in 1941-42, while the bounty on wolf pups (animals under the age of three months) remained at \$5.00.

This increased bounty was probably the principal incentive to the intensified hunting and trapping of these animals which resulted in an extremely large increase in the number of wolves killed and the subsequent applications for the payment of bounty. It will be observed upon reference to the foregoing comparative table that bounty was paid on a total of 1,813 wolves, which represented an increase of 58 per cent over the number on which bounty was paid in the preceding fiscal year. It will also be noted that this is the largest number of wolves on which bounty has been paid since the year ending March 31st, 1938.

During the year 1941-42 the Department received 1,350 claims for the payment of bounty on a total of 1,834 wolves, twelve of which claims in respect of seventeen pelts were refused for various reasons.

The following is a summary showing in detail the sources of origin and the variety of pelts on which application for bounty was made:—

SUMMARY OF APPLICATIONS FOR WOLF BOUNTY

County	Timber	Brush	Pups	Total
Bruce	10	11	0	21
Dufferin	0	1	0	1
Essex	0	1	0	1
Frontenac	10	22	0	32
Grey	0	4	0	4
Hastings	12	5	12	29
Kent	1	1	0	2
Lambton	1	4	0	5
Lanark	10	2	0	12
Leeds	0	1	0	1
Lennox & Addington	20	5	0	25
Middlesex	0	1	0	1
Norfolk	0	10	9	19
Northumberland	0	1	0	1
Ontario	9	6	0	15
Oxford	0	2	0	2
Peterboro	10	1	0	11
Renfrew	52	8	0	60
Simcoe	5	12	6	23
Stormont	1	0	0	1
Victoria	10	16	0	26
Total County	151	114	27	292
DISTRICT				
Algoma	98	65	0	163
Cochrane	14	4	0	18
Haliburton	9	7	0	16
Kenora	352	92	12	456
Manitoulin	26	102	1	129
Muskoka	37	6	0	43
Nipissing	92	9	0	101
Parry Sound	50	4	0	54
Patricia	51	6	0	57
Rainy River	108	57	0	165
Sudbury	66	84	0	150
Temiskaming	6	0	0	6
Thunder Bay	141	43	0	184
Total District	1,050	479	13	1,542
Grand Total	1,201	593	40	1,834

Information assembled from the applications for bounty as submitted to the Department shows that 525 of these wolves were destroyed by farmers, 511 by Indians, 330 by trappers, and the remainder by guides, hunters and park rangers. It would appear that the use of wire snares was responsible for the taking of practically one half of the total, and the remaining half principally by trapping and shooting.

The bounty on wolves which were destroyed in the counties indicated are originally paid, in accordance with the provisions of the Wolf Bounty Act, by the county authorities, and the Department then remits forty per cent of such bounty payments to the county authorities concerned.

As previously shown the total payments for bounty and incidental expenses amounted to \$40,593.77, of which \$40,529.00 was actual bounty, and the remaining \$64.77 was expenses.

GENERAL

TOURIST OUTFITTERS:—

It is generally admitted that the variety of good fishing and hunting available in the Province are not the least of our attractions for tourist visitors. The economic value of good hunting and fishing is apparent when it is remembered that the tourist trade is one of the leading industries of the Province, and in this connection it is well to remember that the intensive efforts which have been made to increase the volume of this tourist business is part of our war effort and as such demands the complete co-operation of every citizen.

The regulation and control of hunting and fishing camps which provide accommodation to the tourist trade in northern Ontario was continued in 1941-42. The necessary licenses to operate were issued to 665 proprietors of such camps, and notwithstanding the uncertainty of existing conditions this was a reduction of only two from the number of such camps which were provided with licenses in the previous year. Of these 610 were issued to resident operators and 55 to non-resident operators.

These camps are located as set forth in the following tabulation:—

Algoma	92
Cochrane	7
Kenora	158
Manitoulin	56
Nipissing	93
Parry Sound	109
Patricia	2
Rainy River	37
Renfrew	14
Sudbury	59
Temiskaming	6
Thunder Bay	32
Total	665

THE BULLETIN:—

Publication of the Bulletin issued periodically by the Department since August, 1936, was suspended because of prevailing economic conditions. The final number of this very interesting publication was issued for the months of November-December, 1941. We do anticipate that this suspension is but a temporary measure and that the publication of the Bulletin will be recommenced when normal conditions have returned to a war-torn world.

The closing comment of the Editor contained in the last issue is quoted herewith:—

“We take this opportunity of expressing thanks to all those who helped to make the editorial road comparatively smooth, and trust our combined efforts have succeeded in stimulating interest in the conservation of our Wildlife Natural Resources.”

GAME AND FISHERIES ACT:—

The only amendments adopted applied to the Fisheries Regulations, and the principal changes included,—

- (a) Minor alterations in the dates of the open seasons for pike, yellow pickerel and lake trout;
- (b) The provision of minimum size limits with respect to yellow pickerel when taken by angling, 13 inches, and for maskinonge, 24 inches; and
- (c) A daily limit of catch was provided to apply to perch when taken by angling,—viz:—fifteen (15) per day for the waters of Lake Mindemoya (district of Manitoulin), and twenty-five (25) per day for other provincial waters.

Regulations provided during the year by Order-in-Council not elsewhere referred to in this Report included:—

- (a) The issue of permits to authorize the operations of those engaged in the sale of gill nets, in accordance with Section 17 of the Game and Fisheries Act, and requiring submission to the Department by such permittees of monthly returns showing such sales;
- (b) Authorizing the issue of a non-resident angling license for a restricted period of time, viz:—three consecutive days, at a fee of \$2.00.
- (c) To prohibit the hunting of deer and moose in the territory lying within a distance of one and one-half miles on either side of Highway No. 70, between Kenora and Fort Frances; and
- (d) An open season for black and grey squirrels in southern Ontario, south of the French and Mattawa Rivers and Lake Nipissing, except in the counties of Essex and Kent, October 24th, 25th and 29th, and November 1st, and in the counties of Essex and Kent, October 24th and 25th, and providing limits of catch not to exceed five (5) such animals per day.

ENFORCEMENT

The Department's field officers are an essential part of the administration services which are provided, and they play an important role in the conservation of the resources with the supervision of which we are charged. Every member of this service has an extensive district to cover and their work is made less onerous by reason of the co-operation they receive from interested sportsmen who devote a measure of their endeavours to seeing that the depredations of the poacher and the law breaker are neither countenanced nor permitted. Valuable assistance in this work of enforcement is also received from the many members of the Provincial Police force.

A voluntary group of sportsmen and nature lovers known as Deputy Game and Fishery Wardens lend a great deal of moral and practical support in checking and preventing violations of the provisions which are in effect. These honorary officers are supplied with proper identification and under their appointments are provided with the necessary authority to take individual action where such is demanded in the instances which come under their observation.

The Department would naturally prefer to find respect for the law so complete that prosecutions would not be necessary, but until such a condition does obtain vigorous action to discourage infractions, minor or otherwise, will continue to be taken.

In addition to the work of the regular enforcement officers, Provincial Police, and Deputy Game and Fishery Wardens a great deal of co-operation and support is

given by the Game and Fish Protective Associations throughout the Province. There are close to two hundred of such organizations and they represent the organized effort of sportsmen to conserve and protect the provincial wild life resources through educational and practical means. They are of great benefit and assistance in consolidating public opinion towards a proper appreciation of the value of these resources and respect for the legislation and regulations which govern their administration, and from the personal experience of their individual members furnish a great deal of practical knowledge valuable in the framing of proper and effective laws.

It should be appreciated that the difficulties of protecting these resources scattered over such a vast extent of territory are very considerable, and that only the complete co-operation of the general public will ensure the success of our efforts. The majority of sportsmen were never more conservation-minded than they are at present, and sporting ideals have reached a high plane. This is a splendid augury for the future success not only of the sports of hunting and fishing, as well as of the trapping industry, but also for the protection and development of the resources which make them possible.

In the usual performance of their patrol service enforcement officers found it necessary to place under seizure various articles of hunting, fishing and trapping equipment, as well as game, fish and the pelts of fur-bearing animals taken, in 1,525 cases in which they had evidence of violations of provisions of the Game and Fisheries Act and Regulations. Game and Fisheries Overseers were responsible for this action in 1,339 cases, Deputy Game Wardens in 84 cases, Provincial Police Constables in 15 cases, and in the remaining 87 cases the action was provided by Overseers, Police or Deputy Game Wardens acting in co-operation with each other.

The following is a summary of the articles which were confiscated:—

Live animals and birds	in 10 cases
Birds, game animals and meat	in 147 cases
Fire-arms and ammunition	in 645 cases
Fish	in 162 cases
Nets and fishing equipment	in 167 cases
Angling equipment	in 86 cases
Pelts and hides	in 291 cases
Traps and trapping equipment	in 186 cases
Canoes, rowboats and motor boats	in 33 cases
Outboard motors	in 10 cases
Motor vehicles	in 5 cases
Flashlights and lanterns	in 23 cases
Spears	in 58 cases
Miscellaneous articles	in 32 cases

The fact that more than one item was reported seized in many of these cases,—such as fire-arms and game, venison and deer hides, nets, fish and boats, fishing tackle and fish, traps and pelts, spears and lights, as well as other combinations, would be responsible for the apparent discrepancy as between the actual number of cases in which seizures were reported and the total cases reported in the previous table.

Confiscated firearms were as follows:—283 .22 calibre rifles (single shot and repeaters), 11 25-20 rifles, 92 heavy calibre rifles, 203 shotguns (single barrel and double barrel), 34 repeating shotguns, 2 automatic shotguns, 3 combination weapons (rifle and shotgun barrels), 4 revolvers and 63 air or spring guns.

Confiscated pelts of fur-bearing animals were as follows:—335 beaver, 2 fisher, 42 fox (black, cross and red), 96 mink, 726 muskrat, 4 otter, 4 rabbit, 54 raccoon, 60 skunk, 12 squirrel and 54 weasel, as well as 37 deer and moose hides.

Included among the miscellaneous articles which were seized are three axes, one suitcase, one trunk, eight packsacks and haversacks, one tent, thirty-seven duck decoys, one box of tools, four batteries, three hounds and two ferrets.

Charges were laid and prosecutions undertaken in 1,201 cases involving violations of provisions of the Game and Fisheries Act and Regulations. Convictions were registered and penalties imposed in 1,117 of these cases, in 70 cases the charges were dismissed by the presiding Magistrates, and in 14 cases the charges were subsequently withdrawn. These prosecutions were undertaken by Game and Fisheries Officers in 1,144 cases, by the Provincial Police in 28 cases, in 18 cases by Game and Fisheries Officers and Provincial Police Constables acting in co-operation with each other, and in 11 cases in which trespass was involved by the property owners concerned.

REPORT OF THE FISH CULTURE BRANCH

During the year the department operated twenty-seven hatcheries and rearing stations in a satisfactory manner. With the exception of maintenance and necessary repairs, additional hatchery construction was not undertaken.

THE CULTURE AND DISTRIBUTION OF FISH

Speckled Trout:

In keeping with the objective, in excess of 3,000,000 yearling speckled trout were planted in suitable waters. In addition, 16,732 adults and 394,000 fingerlings, which could not be accommodated in the hatcheries and ponds, were distributed.

Brown Trout:

The distribution of brown trout yearlings was 37.4 per cent. greater than that of the preceding year.

Brown trout are not planted in waters which continue to support native trout in a satisfactory manner. For the most part the distribution of browns has been confined to streams in Southern Ontario which have been giving promising results. Since 1934 planting in lakes and streams of northern Ontario has been avoided, with two or three exceptions; in those particular exceptions speckled trout would not be affected.

Rainbow Trout:

(a) Steelhead trout—

Distribution of fingerlings and yearlings of this species was 45 and 40 per cent., respectively, lower than that of the preceding year.

This species is strongly migratory and descends from small streams in which it is planted to larger waters. For example, rainbows planted in streams flowing into the Great Lakes migrate to the latter probably before their third year and, after sexual maturity, return to the streams, spawn and soon after return to the lake again. Excepting in the large rivers and lakes where they remain after planting, and these cases are apparently few, their value from the angling standpoint is open to question. Planting is confined to suitable and large, torrential rivers of the north and also to the large, warm rivers of the south where interference with speckled trout is nil or nearly so.

It is desirable that a check be made in regard to the waters stocked with this species to determine the validity of further planting.

(b) Kamloops trout—

A concise account of this species was given in the report for 1940. Briefly, it

has excellent game fish possibilities. It will become established in an environment similar to that of speckled trout and it is non-migratory. We have evidence to show that it has become established in a satisfactory manner in some of the lakes to which it has been introduced.

During the year substantial plantings were made, namely, 88,000 fingerlings and 25,000 yearlings.

Lake Trout:

The total distribution of eyed eggs, fry and fingerling lake trout was 78 per cent. greater than in 1940. Progress made in regard to the distribution of fingerlings was particularly commendable, namely, 147 per cent. increase over that of the previous year.

Whitefish:

There was a decrease in the amount of whitefish fry planted, amounting to 6.8 per cent. The decrease was due to weather conditions in Hay Bay, (vicinity of the Bay of Quinte). Storms interfered with the operation of nets to such an extent that many of the trapped whitefish were liberated. Heavy storms at Little Current and on Lake Wanapitei also interfered with spawn-taking operations. At Kenora ice formed on the nets and on the sides of the pounds; this forced the retainers under water and liberated 50 per cent. of the whitefish. Immediately after the storm it was necessary to remove the nets as the lake was freezing over. At Fort Frances the nets were in a protected area but due to ice formation it was necessary to remove them and to liberate the fish before spawn-taking operations were completed. On Lake Erie in the vicinity of Port Dover, spawn-taking operations have become reduced in recent years. Normal conditions will undoubtedly be re-established after the war.

Fortunately, spawn-taking operations at the west end of Lake Erie, namely, at Kingsville were very satisfactory. Moreover, distribution took place sufficiently early in the spring of 1942 to be included in the statistics of the fiscal year to which this report has reference; otherwise, the decrease in distribution of whitefish fry would have greatly exceeded 6.8 per cent.

Herring:

The collection of herring eggs is confined to the Bay of Quinte region, Lake Ontario, and to Lake Erie. For reasons similar to those cited in the discussion under whitefish, distribution of herring fry was 82.4 per cent. lower than that of the previous year.

Yellow Pickerel (Pike-Perch):

The distribution of pickerel fry was 43 per cent. less than that of the previous year. At Glenora hatchery the collection was reduced to about one-third the 1940 take due to a storm which destroyed the nets used to collect the pickerel. At Little Current the collection was about average. At Kenora and Fort Frances the collection was about 60 per cent. less, due to unusually hot weather prior to the usual spawning time. When spawning operations commenced the water temperature was high and, in fact, 40 per cent. of the pickerel handled had spawned naturally.

Small-Mouthed Black Bass:

The greatest effort was put forward to increase the number of black bass fingerlings planted, consistent with the facilities available. Reference to Appendix No. 2 will indicate how successful those efforts have been. The distribution of fingerlings was 54 per cent. greater than that of the previous year. At the same time the number of fry planted was substantial.

Large-Mouthed Black Bass:

The distribution of large-mouthed black bass fingerlings was 5,500 in 1940 and 17,700 in 1941.

It should be stated that only two small ponds were used for this work.

Yellow Perch:

The number of perch eggs collected in the vicinity of the Kingsville hatchery, Lake Erie, is subject to wide fluctuations each year. Although much lower than some previous collections, the 1941 take was 143 per cent. greater than the take of 1940.

Maskinonge:

The distribution of maskinonge fry was 10 per cent. less than that of the preceding year. In addition, 1,494 fingerlings were planted.

In the culture of maskinonge, provided the temperature gradient is rising with no sudden or serious drops, a good yield of eggs should be obtained and a good hatch of fry result. Since the establishment of a maskinonge hatchery at Deer Lake, Peterborough County, much better results have been obtained, as the temperature of the water is more constant during the developing and hatching period.

After feeding starts, the chief obstacles which have not been surmounted, entirely, are cannibalism, inadequate food supply and predators. Cannibalism has been overcome to some extent at least by encouraging the development of vegetation in the pond; this helps to protect the fish from one another. The supply of adequate amounts of natural food, since maskinonge fry will not take artificial food, is another means of reducing cannibalism. As is well known, maskinonge are voracious feeders and large amounts of natural food varying in size from minute water fleas and insects to minnows must be provided. Minnows are taken by the maskinonge before the latter are two inches in length. The pond is fertilized to stimulate the growth of aquatic life and vegetation, thereby increasing the food supply, and facilities are available for raising minnows. It was found, however, that these facilities were not sufficient, and it was necessary to harvest minnows from adjacent waters. One difficulty in supplying minnows is that they are not always available early enough to keep pace with the requirements of the maskinonge. The forage minnow which was used, although very satisfactory from some standpoints, is too late in spawning to be of use in the early feeding of the young maskinonge. In order to overcome this difficulty the silvery minnow, an early spawner, is now being cultured.

Aquatic vegetation in a pond acts as a refuge for valuable insects as well as for predatory insects. During the year under discussion large numbers of nymphs of the large water bug, and also a smaller variety of water bug, developed in the pond. These bugs are so constructed that they are difficult to observe among the aquatic vegetation as they have considerable protective resemblance to the neighbouring vegetation and to the environment, generally. They are predaceous and have mouth parts adapted for piercing and sucking, and they attack not only small fry but sizable fingerlings. The nymphs are air breathers and, as it is necessary for them to come to the surface of the water to breathe, in order to exterminate them the surface of the water was covered with a thin film of gasoline (kerosene or coal oil is equally effective). When the larvae were exposed to this treatment for an hour they were destroyed.

CLOSED WATERS

One of the practical methods of conserving the breeding stock of fish is to close natural water areas to all fishing permanently, or for different periods of time, and in these areas the fish thrive without interference and spread to other parts of the same

lake or river. By such means a permanent breeding stock is set up, and there is taken each year only the natural increase from it.

In addition to the waters already closed for the natural protection and propagation of fish, the following were closed during the year, April 1, 1941, to March 31, 1942:

BEAVER RIVER,

From the boat houses to the eastern limit of the village of Beaverton, commonly known as "Bass Spawning Beds", closed during the closed season for black bass.

GEORGIAN BAY (Portion located as follows):

- (a) An area approximately 1 mile square lying west of Electric Island;
- (b) An area approximately 1 mile square lying west of lot 51, concession VIII, Township of Harrison, District of Parry Sound;
- (c) An area lying east of and extending approximately 2 miles along the shore line opposite concessions XIII and XIV, Township of Harrison, District of Parry Sound.

OSBORNE, RAINBOW, HILL, PROSPECT, TEA and MINK LAKES,
Township of Bridgland, District of Algoma.

KEKEKWA LAKE,

Southeast of Eagle Lake and north of Upper Manitou Lake, District of Kenora.

TWIN LAKES,

Township of Hudson, District of Timiskaming; closed to angling May 20 to June 28, in each year, to protect black bass.

WHITEFISH, BASS and CLEAR LAKES,

Township of Humphrey, District of Parry Sound; prohibiting winter fishing.

WHITE PINE LAKE,

Township of Gamble, Timagami Forest Reserve, District of Timiskaming.

REMOVAL OF COARSE FISH

During their spawning run, ling were harvested from Crow Lake, Oso Township, and Fish Creek (Bobs Lake), Township of Bedford, County of Frontenac, and Otty Lake, Township of North Elmsley, County of Lanark. The take was as follows:

	Number of Ling	Average Weight	Total Weight
Crow Lake	512	8 lbs.	4,096 lbs.
Bobs Lake	2,109	9 lbs.	18,981 lbs.
Otty Lake	79	2 lbs.	158 lbs.
Total.....			23,235 lbs., or 11.6 tons.

A thaw set in after the net was set in Gibbs Creek (Otty Lake) which interfered with the effectiveness of the operations.

BIOLOGICAL SURVEYS

A biological survey of Tanner's Lake, concession VII, lot 31, N. Dumfries Township, County of Waterloo, indicated that it was suitable for large-mouthed black bass.

A pond at the water-works pumping station in the City of Guelph was suggested as a rearing pond for brown trout by the Wellington County Fish and Game Protective Association. It was recommended that this pond should be given an experimental trial but not on a large scale, as its value for the purpose is doubtful.

Union Creek, concessions X to XV, Galway Township, County of Peterborough, was studied from the standpoint of its suitability for fish and it was recommended as being suitable for brown trout.

The power dam at Healey Falls was examined regarding fish drawn into the penstocks. This dam is located on the Trent River near Campbellford. It was recommended that a grating be installed some distance away from the penstocks.

The Lynn River, Woodhouse Township, County of Norfolk, was examined for possible pollution and its suitability for brown trout. At the time of the investigation there was no evidence of active pollution.

An investigation of the pollution of Guncotton Bay, on the Georgian Bay, vicinity of Nobel, was made. It was found that the effluent repelled the fish from the area. If it is found necessary to precipitate the toxic substances from solution, thorough filtration or settling-out methods must be used in order to prevent any permanent damage to this particular water-area. The damage being done at the time of the investigation was only of a temporary nature and had no permanent effect on the bottom condition of the bay.

MacGregor Creek, a tributary of the Thames River, in the vicinity of Chatham, was investigated and it was found that commercial effluents from industrial plants and domestic sewage cause the pollution which should be controlled or eliminated.

Early in August, residents of Rockland and Clarence reported dead fish of all sizes and species on the shores of the Ottawa River. A joint investigation was conducted by officials of the provinces of Ontario and Quebec, and recommendations were submitted on the basis of the enquiry.

Pollution of the Moira River between Corbyville and Belleville was investigated and was found to be caused by industrial wastes, and recommendations were made with a view to controlling the wastes in question. The precipitation and settling-out of the wastes were not efficient due to the shallowness of the settling basins and the porous rock underneath. It was recommended that the use of molasses in the operations should be confined to winter months when the water is colder and in greater volume.

An investigation was made in regard to washings of clay and mud into a stream from a gravel pit at the northern city limits of Waterloo. It was found that the stream bed was covered with clay and mud, that settling basins of adequate capacity were required, and that the basins should be dredged out at intervals. Satisfactory control of this particular pollution problem was undertaken by those responsible for it.

During the period, September 8 to 12, 1941, nets of various mesh were set off Port Maitland, Lake Erie, for the purpose of determining the efficiency of the different mesh for the taking of perch.

The Ontario Fisheries Research Laboratory of the Department of Zoology, University of Toronto, continued field and laboratory studies of lakes and streams in Algonquin Park.

Yearling speckled trout were provided by the Ontario Department of Game and Fisheries and were distributed through the co-operation of the Park staff and the

members of the Laboratory. The lakes which were stocked are included in the list in Appendix No. 1 under the District of Nipissing.

The experiment on the alternate annual closure of lakes was continued. The purpose of the experiment was to determine the value of the alternate annual closure of lakes as a means of increasing and maintaining the stock of game fish in those waters. As a part of this plan, lakes adjacent to one another are closed in alternate years so that any area will have lakes open to fishing each year, and lakes which are closed and in which the stock is given every opportunity to increase. In this way anglers taking a trip through the Park will find waters open to angling along any canoe route which they wish to travel.

The 21 lakes which were closed in 1940 were open in 1941, and in 1941 there were 17 other lakes closed which will in turn be open to fishing in 1942.

The results of the closures are now becoming evident. The speckled trout are showing an immediate favorable response, and the lake trout are responding favorably, but more slowly because of their slower rate of growth. The total result is that there is an increase in the number of fish available to the angler and the fish are showing an increase in size as a result of the closure. These favorable results are much more marked in some lakes than in others.

It is most desirable to carry on this procedure for some time yet on the experimental basis to properly evaluate its influence upon both the speckled trout and the lake trout in the different lakes.

The rate at which speckled trout grow is quite well known as they have been raised in hatcheries where they are often kept for years and the growth of wild trout has been determined by studies of the rings formed on the scales. Little is known about the rate of growth of lake trout and yet this information is necessary if we are to understand the results of the closure of lakes on the lake trout fishery. To this end a study of the rate of growth of lake trout in two Algonquin Park lakes has been started by Dr. Fry who has found in general that lake trout show approximately the following age-length relations:

Age in years	Length in inches
3	8
4	10.5
5	11.5
6	12.5
7	13.5

In order to evaluate more completely the stocking of the lakes and the alternate annual closure it is most important that the anglers continue their co-operation as they have in the past with the collection of complete creel census of all species of fish taken in all the waters of Algonquin Park.

With the demands of war taking its toll upon the staff of the Fisheries Laboratory this co-operation of the anglers is increasingly important and valuable as the reduced staff of the Laboratory is finding it increasingly difficult to carry out all the work necessary to measure these fish cultural activities, so that we look to the anglers for increased assistance in this field.

The stocking of the lakes, the alternate annual closure, and the measurement of the results of these methods are the most important fish cultural activities of the Laboratory as a war measure. Most of the other activities have been reduced to a minimum for the duration.

Work on the insect population of streams as food supply for speckled trout was continued on a reduced scale as also was the study of the food of the lake trout and the factors responsible for the movement of the game fish at different seasons of the year."

ACKNOWLEDGMENTS

I cannot close this report without expressing my appreciation of the valuable co-operation which was provided throughout the year by the Ontario Federation of Anglers and Hunters, and the many local Game and Fish Protective Associations which comprise the Federation and by the Northern Ontario Tourist Trade Association. The organized efforts of these Federations to develop the spirit of conservation has been of inestimable assistance and has resulted in many pleasant and desirable connections. Favourable mention might also be made of the genuine assistance and co-operation which has at all times been provided by the Township Councils or the Controlling Organizations in the Regulated Game Preserves. The success which this scheme has attained would probably not have resulted without such co-operation.

My concluding comments concern the work of the staff. Members of the Departmental service, both at Toronto and throughout the Province, have been quite conscientious in the performance of their duties, and generally courteous in their contacts with the public in their efforts to secure the best results.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS,
APRIL 1st, 1941, to MARCH 31st, 1942.

LARGE-MOUTHED BLACK BASS

FRY

Bruce	20,000
Frontenac	10,000
Huron	10,000
Leeds	50,000
Peterborough	10,000
Victoria	10,000
Total	110,000

FINGERLINGS

Bruce	500
Grey	500
Lincoln	1,500
Muskoka	2,000
Northumberland	500
Oxford	1,300
Parry Sound	8,400
Simcoe	1,000
Victoria	2,000
Total	17,700

ADULTS

Oxford	28
York	81
Total	109

SMALL-MOUTHED BLACK BASS

FRY

Bruce	40,000
Frontenac	35,000
Grenville	20,000
Haliburton	105,000
Hastings	60,000
Lanark	45,000
Leeds	30,000
Lennox, Addington	25,000
Manitoulin	114,000
Muskoka	185,000
Nipissing	80,000
Ontario	40,000
Parry Sound	370,000
Peterborough	167,500
Renfrew	30,000
Simcoe	120,000
Stormont	5,000
Sudbury	180,000
Victoria	160,000
Waterloo	80,000
Wellington	20,000
Total	1,911,500

FINGERLINGS

Algoma	112,250
Brant	1,000
Bruce	8,600
Carleton	1,000
Cochrane	500

Elgin	3,000
Frontenac	21,200
Grey	2,000
Haldimand	1,500
Haliburton	5,500
Halton	1,250
Hastings	16,600
Huron	3,800
Lanark	10,750
Leeds	4,600
Lennox, Addington	8,000
Manitoulin	79,000
Middlesex	4,400
Muskoka	11,000
Nipissing	122,700
Oxford	1,000
Parry Sound	41,000
Peel	1,000
Peterborough	25,100
Prince Edward	7,500
Renfrew	10,700
Simcoe	11,700
Sudbury	156,775
Thunder Bay	8,000
Timiskaming	1,500
Victoria	6,000
York	3,000

Total 691,925

YEARLINGS AND ADULTS

Algoma	367
Brant	36
Carleton	25
Frontenac	86
Hastings	550
Lanark	20
Leeds	79
Lennox, Addington	300
Middlesex	70
Muskoka	195
Oxford	84
Parry Sound	150
Peterborough	220
Miscellaneous	72

Total 2,254

MASKINONGE

FRY

Carleton	25,000
Grenville	30,000
Haldimand	10,000
Haliburton	10,000
Hastings	180,000
Leeds	40,000
Muskoka	45,000
Nipissing	40,000
Northumberland	165,000
Ontario	45,000
Parry Sound	10,000
Peterborough	1,060,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1941, to March 31st, 1942—Continued

MASKINONGE—Continued

Prince Edward	25,000
Renfrew	50,000
Simcoe	35,000
Stormont	20,000
Victoria	280,000
Waterloo	5,000
York	25,000

Total 2,100,000

FINGERLINGS

Nipissing	300
Peterborough	794
Victoria	400

Total 1,494

PERCH**FRY**

Lake Erie	30,600,000
Lake St. Clair	1,000,000

Total 31,600,000

PICKEREL
EYED EGGS

Exchange	2,000,000
Kenora	500,000
Muskoka	2,000,000

Total 4,500,000

FRY

Algoma	19,700,000
Bruce	2,200,000
Carleton	1,500,000
Cochrane	3,500,000
Essex	500,000
Frontenac	9,350,000
Grenville	1,250,000
Grey	800,000
Haldimand	750,000
Haliburton	1,450,000
Hastings	5,250,000
Kenora	20,900,000
Lanark	6,700,000
Leeds	3,250,000
Lennox, Addington	2,050,000
Manitoulin	9,100,000
Middlesex	4,500,000
Muskoka	3,250,000
Nipissing	8,000,000
Northumberland	2,800,000
Ontario	650,000
Parry Sound	13,050,000
Peterborough	16,050,000
Prince Edward	9,790,000
Rainy River	22,500,000
Renfrew	6,800,000
Russell	1,000,000
Simcoe	7,000,000
Stormont	500,000

Sudbury	12,400,000
Thunder Bay	1,500,000
Timiskaming	5,850,000
Victoria	1,100,000
Great Lakes	18,500,000

Total 223,490,000

BROWN TROUT
FINGERLINGS

Brant	10,000
Elgin	40,000
Norfolk	10,000

Total 60,000

YEARLINGS

Brant	17,800
Bruce	32,800
Carleton	3,600
Durham	6,200
Elgin	24,750
Grey	47,700
Haldimand	1,000
Haliburton	150
Halton	26,400
Hastings	9,800
Huron	12,000
Lambton	1,000
Lanark	2,000
Lincoln	1,000
Middlesex	3,850
Norfolk	28,050
Northumberland	5,300
Ontario	1,800
Oxford	10,200
Peel	5,100
Perth	3,600
Peterborough	15,790
Simcoe	36,000
Timiskaming	1,800
Waterloo	10,800
Welland	4,100
Wellington	24,100
Wentworth	1,200
York	7,600
Miscellaneous	698

Total 346,188

LAKE TROUT
EYED EGGS

Exchange	800,000
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FRY

Frontenac	161,000
Hastings	102,500
Lanark	8,000
Leeds	17,500
Lennox, Addington	34,000
Peterborough	80,000
Rainy River	330,000
Thunder Bay	120,000
Great Lakes	60,000

Total 913,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1st, 1941, to March 31st, 1942—Continued

LAKE TROUT—Continued
FINGERLINGS

Algoma	636,200
Cochrane	60,000
Haliburton	290,500
Hastings	40,000
Kenora	345,000
Leeds	5,000
Lennox, Addington	10,000
Manitoulin	90,000
Muskoka	350,000
Nipissing	220,000
Parry Sound	295,000
Peterborough	5,000
Rainy River	205,200
Renfrew	180,000
Simcoe	75,000
Sudbury	210,000
Timiskaming	144,000
Great Lakes	14,905,500
Total	18,066,400

RAINBOW TROUT
FINGERLINGS

Algoma	100,000
Nipissing	5,000
Sudbury	33,500
Timiskaming	24,000
Miscellaneous	1,500
Total	164,000

YEARLINGS

Dufferin	3,600
Elgin	500
Haliburton	1,500
Norfolk	2,500
Simcoe	1,500
Miscellaneous	2,150
Total	11,750

KAMLOOPS TROUT
FINGERLINGS

Algoma	84,650
Sudbury	3,500
Total	88,150

YEARLINGS

Bruce	1,500
Grey	2,900
Muskoka	13,500
Parry Sound	3,300
Peterborough	1,500
Timiskaming	2,000
Miscellaneous	300
Total	25,000

SPECKLED TROUT
FINGERLINGS

Algoma	105,000
Grey	22,000
Muskoka	1,000
Nipissing	5,000
Northumberland	110,000
Peel	150,000
Miscellaneous	1,000
Total	394,000

YEARLINGS

Algoma	514,150
Brant	500
Bruce	16,000
Cochrane	176,700
Dufferin	33,700
Durham	18,250
Elgin	2,600
Frontenac	48,526
Grey	167,400
Haliburton	43,300
Hastings	113,480
Huron	7,100
Kenora	9,000
Lanark	13,200
Leeds	1,600
Lennox, Addington	41,500
Lincoln	1,000
Manitoulin	100,000
Muskoka	160,000
Nipissing	194,220
Norfolk	7,350
Northumberland	21,950
Ontario	12,000
Oxford	750
Parry Sound	162,400
Peel	12,800
Peterborough	48,191
Renfrew	119,020
Simcoe	27,500
Sudbury	338,900
Thunder Bay	494,800
Timiskaming	136,600
Victoria	1,100
Waterloo	2,550
Wellington	5,100
York	500
Miscellaneous	17,237
Total	3,060,174

ADULT

Algoma	4,250
Thunder Bay	5,287
Timiskaming	6,620
Miscellaneous	575
Total	16,732

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1st, 1941, to March 31st, 1942—Continued

WHITEFISH**FRY**

Kenora	18,180,000
Prince Elward	16,000,000
Rainy River	11,811,000
Simcoe	3,000,000
Thunder Bay	250,000
Great Lakes.....	326,719,500
Total	375,960,500

HERRING**FRY**

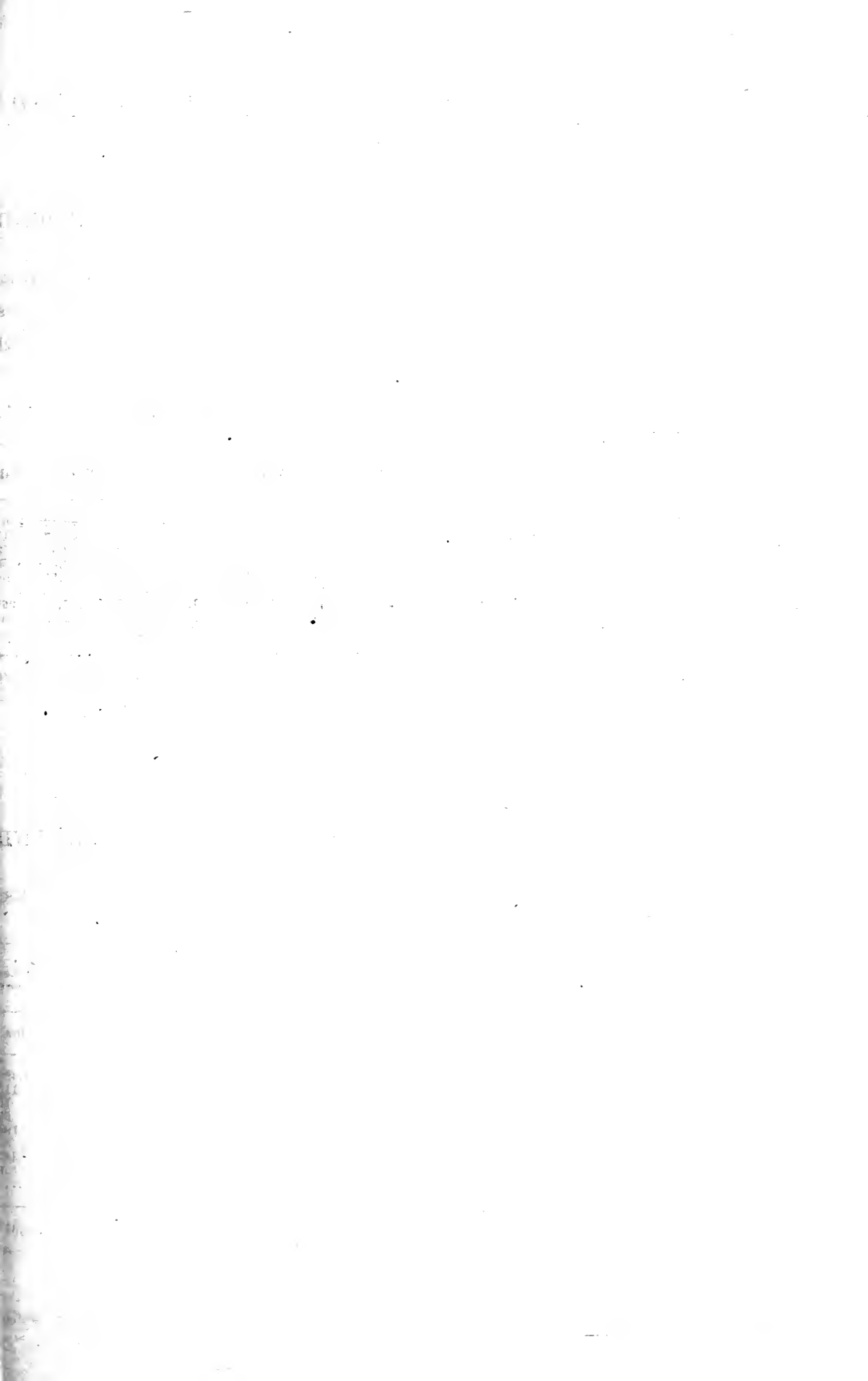
Carleton	500,000
Frontenac	300,000
Hastings	200,000
Lennox, Addington	900,000
Prince Edward	3,000,000
Great Lakes	3,730,000
Total	8,630,000

APPENDIX No. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES—1937 TO 1941, INCLUSIVE

	1937	1938	1939	1940	1941
Large-mouthed Black Bass					
Fry	135,000	57,500	.....	230,000	110,000
Fingerlings	4,120	8,061	1,890	5,500	17,700
Yearlings & Adults	92	.....	497	152	109
Small-mouthed Black Bass					
Fry	1,275,000	804,000	1,386,000	2,512,500	1,911,500
Fingerlings	141,900	169,800	226,325	449,154	691,925
Yearlings & Adults	5,893	7,738	7,739	1,671	2,254
Maskinonge					
Eyed Eggs .....	.....	.....	120,000	.....	.....
Fry	420,700	2,005,000	2,675,000	2,345,000	2,100,000
Fingerlings .....	.....	.....	1,300	2,333	1,494
Perch—Fry	9,150,000	59,150,000	72,360,000	13,000,000	31,600,000
Pickeral (Yellow)					
Eyed Eggs	2,000,000	2,012,500	7,000,000	2,000,000	4,500,000
Fry	263,743,400	271,567,500	327,500,000	393,887,000	223,490,000
Adults .....	.....	.....	.....	100	.....
Pickeral (Blue)					
Fry	1,000,000	500,000	.....	.....	.....
Brown Trout					
Fingerlings .....	.....	.....	29,954	182,725	60,000
Yearlings	97,484	59,592*	375,070	252,000	346,188
Lake Trout					
Eyed Eggs	3,225,000	2,437,000	1,845,850	575,000	800,000
Fry	4,667,000	7,665,000	7,236,900	7,564,000	913,000
Fingerlings	15,782,350	10,575,200	9,964,400	7,312,100	18,066,400
Atlantic Salmon					
Fry	7,200	.....	.....	.....	.....
Fingerlings .....	.....	.....	.....	46,385	.....
Yearlings .....	.....	4,800	.....	.....	.....
Rainbow Trout					
Fingerlings	105,240	321,600	109,635	298,420	164,000
Yearlings .....	.....	6,727	23,145	19,724	11,750
Adults .....	.....	.....	1,009	.....	.....
Kamloops Trout					
Fingerlings	80,000	25,821	105,000	.....	88,150
Yearlings .....	.....	.....	.....	26,500	25,000
Speckled Trout					
Eyed Eggs .....	.....	1,000	.....	.....	.....
Fingerlings .....	.....	373,314	337,000	611,375	394,000
Yearlings	384,725	2,083,538	2,976,559	3,278,114	3,060,174
Adults	1,167,073	4,452	6,315	7,150	16,732
Whitefish					
Eyed Eggs	4,000,000	.....	.....	.....	.....
Fry	383,683,900	323,700,500	326,657,000	403,339,000	375,960,500
Herring					
Eyed Eggs	30,000	.....	.....	.....	.....
Fry	5,270,000	49,725,000	38,550,000	49,050,000	8,630,000
Miscellaneous	3,053	.....	41	.....	.....
TOTALS	696,395,280	733,265,643	799,496,629	886,995,903	672,960,876

* Yearlings and adults.



APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters of
EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters	734	5	34	\$ 11,450	159	\$ 70,975	303	\$14,450	469,123	\$ 61,940
Lake Superior	396	11	360	64,500	104	44,680	70	4,550	830,237	111,205
North Channel	126	6	149	36,800	37	18,750	43	2,240	539,420	55,635
Georgian Bay	436	25	482	120,556	120	100,737	120	5,661	1,419,303	153,716
Lake Huron	284	18	384	101,300	90	58,904	26	2,590	1,350,620	154,077
Lake St. Clair	130	.....	.....	.....	40	14,200	75	4,060	.....	.....
Lake Erie	784	42	827	287,300	149	194,415	120	6,095	2,225,520	367,054
Lake Ontario	544	.....	.....	.....	204	111,860	101	3,744	1,292,230	137,285
Southern Inland Waters	177	.....	.....	.....	7	770	73	2,738	.....	.....
Totals	3,608	107	2,236	\$621,906	910	\$615,291	931	\$46,128	8,126,453	\$ 1,040,912

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickereel (Blue)	Pickereel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	6,143	1,328,134	164,808	869,021	860	1,494,108
Lake Superior	1,433,139	314,887	1,298,485	9,398	18,152	115,296
North Channel	7,983	85,128	211,597	66,947	.....	12,839
Georgian Bay	63,719	747,983	1,501,631	24,873	.....	57,157
Lake Huron	188,594	93,058	1,109,786	1,241	150	194,805
Lake St. Clair .....	.....	518	.....	34,019	200	83,237
Lake Erie	115,559	3,358,647	40	46,522	1,543,808	347,324
Lake Ontario	1,921,835	441,577	125,790	47,099	57,779	6,647
Southern Inland Waters .....	.....	.....	.....	2,016	.....	.....
Totals	3,736,972	6,369,932	4,412,137	1,101,136	1,620,949	2,311,413
Price per pound.....	.05	.11	.11	.06	.05	.11
Values	\$186,848.60	\$700,692.52	\$485,335.07	\$66,068.16	\$81,047.45	\$254,255.43

No. 3

DEPARTMENT, ONTARIO

the Province of Ontario, for the year ending December 31st, 1941.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers & Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	
...	...	...	45	\$15,470	55	\$ 991	1	\$ 1	1,580	\$313	...	...	124	\$30,235	101	\$12,215	\$218,040
...	...	...	57	22,600	...	...	...	...	4	5	...	...	65	22,595	48	12,560	282,695
...	...	...	40	16,950	...	...	...	...	...	...	...	...	32	12,475	27	8,900	151,750
6	1,000	\$ 850	79	76,480	52	725	1	2	21,300	2,994	...	...	56	16,250	53	30,283	508,254
...	...	...	103	63,500	...	...	...	...	7,216	815	...	...	57	26,176	24	6,266	413,628
27	7,100	3,905	112	13,650	3	475	2	2	3,300	181	...	...	24	9,150	17	3,790	49,413
32	9,080	6,375	553	276,950	10	1,500	4	20	900	26	...	...	109	176,290	87	32,600	1,348,625
6	590	505	...	...	345	9,135	15	737	2,100	83	...	...	32	7,920	26	5,405	276,674
33	2,860	2,300	...	...	169	3,798	16	46	600	15	...	...	16	1,395	1	300	11,362
104	20,630	\$13,935	989	\$485,600	634	\$16,624	39	\$808	37,000	\$4,432	...	...	515	\$302,486	384	\$112,319	\$3,260,441

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
57,563	...	18,884	116,999	42,639	10,241	392,933	1,415	4,503,748	\$429,182.41
1,950	...	...	81,081	...	...	163,314	...	3,435,702	273,826.19
3,233	...	12,274	6,147	94	672	134,644	97	541,655	44,921.17
1,027	...	4,336	202,660	5,486	47,103	77,588	24	2,733,587	276,356.01
5,168	...	208,705	233,266	20,899	6,386	85,450	445	2,147,953	194,751.18
10,587	100	65,998	...	99,376	333,628	363,867	340	992,370	54,733.38
13,575	...	2,050,050	...	108,481	286,835	1,079,278	643	8,950,762	657,394.95
6,245	16,413	92,569	...	87,646	150,232	172,570	12	3,126,414	192,935.92
...	2,162	7,365	...	82,397	148,498	275,002	...	517,440	22,907.27
99,348	18,675	2,460,181	640,153	447,518	983,595	2,744,646	2,976	26,949,631	...
.40	.07	.05	.06	.08	.05	.03	1.00	...	...
\$39,739.20	\$1,807.25	\$123,009.05	\$38,409.18	\$35,801.44	\$49,179.75	\$82,339.38	\$2,976.00	...	\$2,147,008.48

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1940 Pounds	1941 Pounds	Increase Pounds	Decrease Pounds
Herring	3,597,785	3,736,972	139,187	.....
Whitefish	6,368,617	6,369,932	1,315	.....
Trout	4,364,071	4,412,137	48,066	.....
Pike	1,216,234	1,101,136		115,098
Pickrel (Blue)	2,118,383	1,620,949		497,434
Pickrel (Dore)	2,515,381	2,311,413		203,968
Sturgeon	147,143	99,348		47,795
Eels	34,678	18,675		16,003
Perch	2,471,482	2,460,181		11,301
Tullibee	806,897	640,153		166,744
Catfish	401,934	447,518	45,584	.....
Carp	1,119,538	983,595		135,553
Mixed Coarse	2,799,865	2,744,646		55,219
Caviare	4,948	2,976		1,972
TOTALS	27,966,956	26,949,631		*1,017,325

* Net Decrease

APPENDIX No. 6

STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO—1941

Kind	Quantity Pounds	Price per Pound	Estimated Value
Herring	3,736,972	.05	\$186,848.60
Whitefish	6,369,932	.11	700,692.52
Trout	4,412,137	.11	485,335.07
Pike	1,101,136	.06	66,068.16
Pickrel (Blue)	1,620,949	.05	81,047.45
Pickrel (Dore)	2,311,413	.11	254,255.43
Sturgeon	99,348	.40	39,739.20
Eels	18,675	.07	1,307.25
Perch	2,460,181	.05	123,009.05
Tullibee	640,153	.06	38,409.18
Catfish	447,518	.08	35,801.44
Carp	983,595	.05	49,179.75
Mixed Coarse	2,744,646	.03	82,339.38
Caviare	2,976	1.00	2,976.00
TOTALS	26,949,631		\$2,147,008.48

APPENDIX No. 7

ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS
OF THE PROVINCE
1922—1941 INCLUSIVE

1922	\$2,807,525.21	1932	\$2,286,573.50
1923	2,886,398.76	1933	2,186,083.74
1924	3,139,279.03	1934	2,316,965.50
1925	2,858,854.79	1935	2,633,512.90
1926	2,643,686.28	1936	2,614,748.49
1927	3,229,143.57	1937	2,644,163.49
1928	3,033,944.42	1938	2,573,640.97
1929	3,054,282.02	1939	2,564,516.37
1930	2,539,904.91	1940	2,226,418.18
1931	2,442,703.55	1941	2,147,008.48

Thirty-Sixth Annual Report

OF THE

Game and Fisheries
Department

1942 - 1943

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1944



ONTARIO

TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1 9 4 4

TO THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the Thirty-sixth Annual Report of the Department of Game and Fisheries for the Province of Ontario, for the year ending 31st March, 1943.

Respectfully submitted,

G. H. DUNBAR,

*Minister in Charge,
Department of Game and Fisheries.*

THIRTY-SIXTH ANNUAL REPORT

OF THE

Department of Game and Fisheries of Ontario

TO :THE HONOURABLE G. H. DUNBAR,
Minister in Charge,
Department of Game and Fisheries.

SIR—

I have the honour to submit to you herewith the Thirty-sixth Annual Report of the Department of Game and Fisheries, outlining a summary of the activities of the various Departmental services, and including condensed statistics for the fiscal year ended March 31st, 1943, as well as certain comparative tables.

INTRODUCTORY

The natural resources of a nation form the foundation of a stable economic superstructure and its resultant wealth.

Wild-life is an integral part of the natural resources of the Province of Ontario, and an evaluation of its worth will show that it is an important part of the total economy of the entire Dominion. Briefly, it provides a measure of food and clothing, (fish, flesh and fur), through the usual channels of industry and through the sporting activities of countless thousands of our residents to whom its pursuit affords pleasure and healthful exercise; it creates employment for thousands of our citizens in the important fur industry and its related activities, in the commercial fishing industry, in the manufacture and supply of necessary equipment, as well as for an army of guides, whose business it is to know where and how it may be obtained; it is the greatest asset of our tourist trade, in normal times one of the principal industries of the Province, and which plays an important part in fostering those friendly relations which have prevailed and which now prevail between us and our neighbours to the south.

While the economic value of the wild-life of this Province can thus be computed in monetary terms, it has a moral and recreational value which is of even greater importance particularly to our own residents, for it is the incentive which attracts countless thousands of people into the great outdoors, where the environment of field and stream is conducive to health, happiness and good citizenship.

Wild-life is a public trust, in which every citizen of the Province has an equity, and the administrative policies of the Department have been formulated and developed on that premise. It is essential that this division of our natural resources shall not be impaired and that its perpetuation shall be assured. Having this in mind the work of the Department has been directed towards the protection and rehabilitation of these resources and the progressive development of conservation policies intended to promote wise use without reduction of existing stock. Details of how these plans have been advanced during the period under review, as well as information on the present status of such resources, will be found elsewhere in this report.

The broad policy of conservation which has characterized administrative control for more than three decades has assumed a new importance during the present emergency. The public has become deeply conscious of the value of conservation as an aid to economic security

through the necessity for regulating supply and demand as determined by our war effort. This in turn has emphasized the contribution which wild-life makes to the food supply of the nation, and the necessity for public co-operation in its protection and sane use. The success of Departmental plans for maintaining an adequate reserve of fish and game to meet ever increasing demands depends in large measure upon public support, and it is pleasing to note that this phase of the conservation programme continues to receive encouragement and stimulation through the efforts of organized sportsmen.

Despite the national emergency and the curtailment of many activities occasioned thereby, provision has been made whereby it has been possible to carry on the essential work of the Department for the achievement of the foregoing objectives.

FINANCIAL

The following table shows the total revenue collected by this Department during this particular fiscal year. It outlines the various sources from which this revenue is derived and in detail gives the respective amount collected from each of these sources:—

REVENUE FOR THE FISCAL YEAR ENDING MARCH 31st, 1943

ORDINARY—

MAIN OFFICE

GAME—

Licenses—

Trapping	\$ 39,602.45
Non-resident hunting	93,245.00
Deer	118,083.55
Moose	4,372.50
Gun	102,244.96
Dog	6,450.55
Fur Dealers	26,288.00
Fur Farmers	6,250.00
Tanners	130.00
Cold Storage	209.00

396,876.01

Royalty

122,032.15

\$518,908.16

FISHERIES—

Licenses—

Fishing (Commercial) ..	74,355.00
Angling	306,263.85

380,618.85

Royalty

10,152.32

\$390,771.17

GENERAL—

Licenses—

Tourist Camps	6,565.00
Guides	6,840.00
	13,405.00
Fines	17,718.20
Costs Collected (Enforcement of Game Act)	546.00
Sales—Confiscated Articles, etc.	14,779.25

Rent	3,149.00	
Commission—Retained by Province on sale of Licenses ..	1,758.55	
Miscellaneous	1,315.56	
		<u>52,671.56</u>
Net Ordinary Revenue		\$52,671.56

The total collections represent a decline of more than \$220,000.00 as compared with the revenue produced in the previous fiscal year. The principal reason for this decrease is the reduced amount of fees received from the sale of non-resident licenses, both angling and hunting. In 1941-42 the revenue from the sale of these licenses reached the impressive total of \$600,884.95. The amount received this year from this source was \$399,508.85, a decrease of more than \$201,000.00. This decrease had been anticipated and was unquestionably due to a condition to which reference was made in our previous Annual Report, viz:—the United States now being involved in war would necessarily result in restrictions on travel and transportation facilities, which with the added necessity of stern application to the production of vital war material, would undoubtedly result in a very noticeable decrease in the number of American citizens visiting this country for vacation purposes. Other important reductions in the collection of revenue when compared with that of the previous fiscal year will be observed in the amounts received from the sale of commercial fishing licenses, which decreased \$13,500.00, from penalties imposed on those convicted of violations of provisions of the Game and Fisheries Act, and from the sale of articles confiscated following such convictions, which decreased \$16,000.00, and from fur royalties, which decreased \$8,500.00. It may, however, be of interest to make reference to the fact that the amount of \$231,151.56 received from the sale of various types of hunting licenses to residents of Ontario was \$29,000.00 in excess of the amount derived from the same source in the preceding year.

The following tables include details with reference to the sale of hunting and angling licenses:

ANGLING LICENSES ISSUED

Non-resident:—

Individual (Seasonal)	27,330
Individual (Three-day)	31,597
Family	14,388
Manitoba Residents	697
Boys' Camp	20

HUNTING LICENSES ISSUED

Resident:—

Deer	31,530
Deer (Camp)	373
Deer (Farmers')	7,288
Moose	780
Gun	118,268

Non-resident:—

Small Game	1,473
Deer	1,518
General	795
Bear (Spring Season)	232

Details of expenditure, both ordinary and capital, are set forth in the following statement:—

EXPENDITURE FOR THE FISCAL YEAR ENDED MARCH 31st, 1943.

ORDINARY—

Main Office	\$ 52,385.16
General	39,950.68
Enforcement	209,647.93
Game Animals and Birds	17,949.05
Macdiarmid	3,673.20
Biological and Fish Culture Branch	205,599.97
Grants	5,400.00
Wolf Bounty	33,606.62
Special Warrant—Bear Bounty	3,640.00
<hr/>	
Total Ordinary	\$571,852.61
Capital	2,879.88
<hr/>	
Total Expenditure	\$574,732.49

The principal items of expenditure were made for the payment of salaries and expenses of members of the Enforcement Service and for the maintenance of services provided by the Biological and Fish Culture Branch in connection with the raising, distribution and the planting of fish in suitable waters throughout the Province. More details of the work performed by these two important branches of the Department will be found further on in this report.

There is an additional item of expenditure included in this statement, i.e., for the payment of bounty on bears killed in certain sections of the Province, as provided by the Order-in-Council dated August 19th, 1942, more details of which regulation and expenditure are also incorporated later on in this report.

The sum of \$5,400.00 which was provided for the payment of grants was allotted as follows:—\$2,500.00 to the Ontario Fur Breeders Association to augment the funds of this organization and to permit them to continue their services on behalf of fur farmers who are established and operating in Ontario; \$500.00 to the Ontario Federation of Anglers and Hunters for their educational campaign, one of the principal objectives of which is to emphasize the importance of proper observance of provisions of the Game and Fisheries Act; \$500.00 to Professor W. J. K. Harkness for his services in connection with fish culture research and which services are supplementary to those provided by Departmental Biologists; and the remaining \$1,900.00 to Mr. Jack Miner, Mr. Thomas N. Jones and Miss Edith L. Marsh, who provide sanctuaries for birds, both migratory and native species, on their properties located respectively in the counties of Essex, Elgin and Grey.

From the year's operations it will be noted that there was a surplus of \$387,618.40 which may be considered a satisfactory condition.

The following table details Departmental revenue and expenditure for the various fiscal years from and including the period ended March 31st, 1936:—

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$ 683,938.72	\$451,041.91	\$232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99
1941-42	1,183,269.29	576,762.26	606,507.03
1942-43	962,350.89	574,732.49	387,618.40

GAME

Herewith is a summary of conditions as they apply to the various species of game animals and birds found in Ontario, which information has been compiled from reports secured from officers of the enforcement service throughout the Province:—

DEER:—Generally speaking in those portions of the Province in which the regular open season for the hunting of deer has been in effect conditions with reference to the prevalence of these animals have continued to be quite satisfactory. The period during which they may be lawfully taken as at present provided is not excessively lengthy, and those sportsmen who avail themselves of this opportunity for recreation have displayed an earnest desire to co-operate with the Department in complying with various regulations which govern and which have been provided by the Legislature and which are established on the premise that they are necessary for the future welfare of the existing deer herds. There is good reason to believe that the fine quality of hunting which is at present available in the various deer sections of this Province will prevail for the enjoyment of generations to come, provided there is no relaxation in the present regulations which apply and that the existing co-operation of hunters continues, and also that there arises no contingency detrimental to the existence of this species which is at present unforeseen. In many areas in the extreme southwestern portion of the Province in which this species has been provided the protection of an entire closed period for the past several years there has been a noticeable increase in the number of these animals and which improvement has resulted on some occasions in complaint to the Department regarding damage to field crops. The popularity of this branch of hunting is revealed in the fact that the number of Ontario residents who purchased licenses to hunt deer during the open season of 1942, exclusive of those who purchased farmer's licenses, showed an increase of twenty-five per cent over the number who purchased such licenses during the previous year, or an increase of 6,305 in actual numbers.

The general open season for deer in Division (d), i.e., Southern Ontario, exclusive of the southwestern counties and certain eastern counties, was provided by order-in-council to extend from November 2nd to November 17th. The same period of open season was also provided for that portion of the County of Carleton lying west of the Rideau River, (excepting the Township of Marlborough) and for the Township of Roxborough in the County of Stormont. In the Counties of Simcoe, Dufferin, Grey and Bruce and the northern portion of the County of Huron the hunting of deer was permitted during the period from November 16th to 21st, with the provision that no dogs were to be used during this open season.

The Counties of Northumberland, Durham and Prince Edward and that portion of the County of Ontario lying south of the north boundaries of Brock and Scott Townships as well as the Township of Cambridge in the County of Russell, were included among the areas in which the hunting of deer was prohibited at all times.

MOOSE:—Conditions applicable to moose showed no important changes during the year. Some slight increase was reported in scattered areas in the northern portion of the Province which are favourable to their existence, but as a general rule they are not found in sufficient numbers to justify any extensive hunting. The protection at present provided would appear to be essential for the continued existence of this species. The usual period of open season provided by the Game and Fisheries Act was in effect in Northern Ontario, while a restricted period of open season, extending from October 15th to 30th, 1942, was established by Regulation effective in those portions of the Districts of Nipissing, Sudbury and Temiskaming defined in clause (i) of subsection (b) of Section 7, and in the District of Rainy River and those portions of the Districts of Kenora and Thunder Bay defined in clause (ii) of subsection (b) of Section 7 of the Game and Fisheries Act.

CARIBOU:—This species exists only in very limited numbers and in but few isolated areas. The hunting of caribou is prohibited at all times, and this complete protection would appear to be quite necessary for the maintenance of this species even in its present limited proportions.

ELK:—Little improvement has been reported from the various sections in which these animals are to be found. The original stock was brought into the Province several years ago from Western Canada, and limited numbers were liberated on subsequent occasions in suitable portions of the Counties of Bruce and Peterborough, and in the Districts of Nipissing, Sudbury, Algoma and Thunder Bay. Some specimens are also located on Beausoleil Island in Georgian Bay off the county of Simcoe. The original importations were placed on the Petawawa Crown Game Preserve in the County of Pembroke, where numerous specimens still exist.

BUFFALO:—These animals are to be found only on lands in the Burwash Crown Game Preserve in the District of Sudbury, where they were placed after being brought from Alberta in 1939. Little increase has been reported.

BEAR:—Bear continue to be quite plentiful throughout the northern portion of the Province and increased numbers were reported from many areas. The hunting of this species provides some measure of sport and recreation and as has been stated previously in this report, the Department disposed of two hundred and thirty-two non-resident licenses for the taking of bear during the 1942 spring season, i.e., from April 1st to June 15th.

During the year a regulation was provided to authorize the payment of a bounty of \$10.00 on each bear killed in defence or preservation of live-stock or property. This regulation applied only to bears over the age of twelve months which had been killed in any township in which not less than twenty-five per cent of the total area is devoted to agriculture and which are located in Northern Ontario, the Districts of Parry Sound, Muskoka and Haliburton and in the Counties of Bruce, Frontenac, Hastings, Lennox and Addington, Peterborough, Renfrew and Victoria, and was payable only in respect to bear killed by a resident of the Township in which such bear was actually killed.

RABBITS:—Reports received in the Department would indicate that the various species of rabbit which inhabit the different sections of the Province were quite plentiful, and so speaking generally, there would appear to have been some increase in their numbers in many districts. Cotton-tail rabbits prevail throughout the western and central portions of southern Ontario, the European hare, or jack rabbit, throughout the southwestern counties generally, while snow-shoe rabbits, or varying hare, are to be found in the northern and eastern portions of Southern Ontario and throughout that portion of the Province lying north and west of the Mattawa and French Rivers and Lake Nipissing. In some portions of the south-central and

eastern counties some decrease was reported due to the prevalence of fox. The hunting of rabbits continued to provide excellent sport during the late fall and early winter months for a multitude of interested sportsmen.

PARTRIDGE:—During the period under review there was some decline throughout the Province in the numbers of partridge, though the various species of this fine game bird continued to be sufficiently plentiful to warrant the provision of a short open season, with a restricted take. The general open season, which was effective, covered two periods, viz: October 3rd to 17th and November 2nd to 14th, with a limit of five birds per day and not more than twenty-five in all over the two periods. In the Townships established as Regulated Game Preserve Areas the dates on which partridge could be taken coincided with those provided for the taking of pheasants therein, with a limit of five birds per day. The shooting of partridge was also permitted in the County of Lambton on October 31st, and in the counties of Essex and Kent, on October 29th, 30th and 31st, with a bag limit in each case of five birds per day.

HUNGARIAN PARTRIDGE:—There are but few sections of Ontario which these birds are reported to inhabit, and those areas are restricted in extent, being chiefly in the extreme southwestern counties and in two or three of the eastern counties. Such as are to be found here have resulted from re-stocking undertaken by the Department in previous years. Shooting of this species was restricted to the Counties of Essex and Kent, on October 29th, 30th and 31st, with a bag limit of two birds per day.

PHEASANTS:—In 1942 the Department was responsible for the distribution of 22,399 pheasants, comprised of 20,986 poults, 1,171 adult hens and 242 adult cock birds. The actual purchase price was \$17,400.60. These birds were liberated under the supervision of Departmental field officers, principally in the various Townships established as Regulated Game Preserve Areas, and which distribution totalled 20,070 birds. Of the remainder 2,200 were liberated in suitable areas in a few additional Southern Ontario counties, while various branches of the Ontario Bird Dog Association were allocated 129 birds for use in connection with their spring and fall bird dog trials. Details of this distribution are set forth herewith, and in all cases except as indicated the birds so liberated were poults:—

Regulated Game Preserve Areas:—County of Brant, (three townships—Burford, South Dumfries and Onondaga), 710 birds; County of Elgin, (five townships—Aldborough, Bayham, Dorchester South, Dunwich and Malahide), 1,000 birds; County of Haldimand, (ten townships—Canboro, Dunn, Moulton, Cayuga North, Cayuga South, Oneida, Rainham, Seneca, Sherbrooke and Walpole), 1,830 birds of which 10 were adults; County of Halton, (four townships—Esquesing, Nassagaweya, Nelson and Trafalgar), 1,554 birds of which 204 were adults; County of Lambton, (one township—Plympton), 195 birds; County of Lincoln, (eight townships—Caistor, Clinton, Gainsboro, Grimsby North, Grimsby South, Grantham, Louth and Niagara), 1,665 birds; County of Middlesex, (two townships—Westminster (part) and Metcalfe), 500 birds; County of Norfolk, (four townships—Middleton, Townsend, Windham and Walsingham), 1,020 birds; County of Ontario, (three townships—Pickering, Whitby East and Whitby West), 1,315 birds of which 205 were adults; County of Oxford, (two townships—Dereham and Oxford East), 546 birds; County of Peel, (five townships—Albion, Caledon, Chinguacousy, Toronto (part) and Toronto (Gore), 1,714 birds, of which 229 were adults; County of Prince Edward, (one township—Mariesburgh South), 120 birds; County of Welland, (eight townships—Bertie, Crowland, Humberstone, Pelham, Stamford, Thorold, Wainfleet and Willoughby), 1,935 birds; County of Wellington (one township—Puslinch) 300 birds; County of Wentworth (eight townships—Ancaster, Barton, Beverley, Binbrook, Glanford, Flamboro East, Flamboro West and Saltfleet), 2,100 birds of which 300 were adults; and the County of York, (seven townships—Gwillimbury East, Gwillimbury North, King, Markham, Scarborough Vaughan and Whitechurch) 3,361 birds of which 441 were adults.

General:—County of Essex, 1000 birds; County of Kent, 700 birds, County of Lambton (excluding Plympton Township), 405 birds; County of Leeds, 30 birds; County of Peterborough, 45 birds; and the County of Wellington, 20 birds.

Miscellaneous:—Ontario Bird Dog Association—129 birds, 24 of which were adults, for Niagara, St Catharines, Toronto and London trials.

The favourable conditions which resulted from a satisfactory natural hatch and the intensive re-stocking previously outlined encouraged the provision of special regulations for the shooting of pheasants in certain areas, as detailed herewith:

(a) On Pelee Island the dates provided were October 28th, 29th, and 30th, 1942, with a limit of four birds per day, one of which was to be a hen. Hunters participating, in addition to having the regular hunting license as provided by the Game and Fisheries Act, were also required to be in possession of the special hunting license which the municipality of Pelee Island was authorized to issue for such hunting.

(b) In the Township Regulated Game Preserve Areas, other than the Townships of East Oxford and Plympton, pheasant shooting was permitted on October 23rd and 24th, with an additional day, October 28th, being made available for such shooting provided this last mentioned date was approved by the Controlling Organization in each respective Township area. The date provided in the Township of East Oxford was October 24th, and in the Township of Plympton, October 31st. Special hunting licenses were also required of sportsmen participating in this shoot in these Township Regulated Game Preserve Areas. Bag limits were three cock birds per day.

(c) In the Counties of Essex and Kent such shooting was permitted on October 29th, 30th and 31st, and in the County of Lambton on October 31st. In these counties the bag limit was three cock birds per day.

QUAIL:—These birds are not at all plentiful, and in a great proportion of the Province are practically non-existent. Their prevalence is restricted to the more southerly counties, and the conditions pertaining thereto have been such that it has been impossible to permit hunting of this species in any areas except the counties of Essex and Kent. The Regulation which was provided in 1942 permitted such shooting only in the aforementioned counties for three days, October 29th, 30th and 31st, with a bag limit of four birds per day.

DUCKS:—Conditions applicable to ducks continued to be quite satisfactory. In most areas they are reported to be fairly plentiful with some improvement noticed in various sections. The several varieties which cross Ontario in their southerly fall migration provided excellent opportunities for recreation for the goodly number of hunters to whom this branch of the sport of hunting has an especial appeal. The regulations which are in effect for their protection are provided under the Migratory Birds Convention Act by the Federal Government with the co-operation of the various Provinces of the Dominion, and conditions were sufficiently satisfactory to warrant an extension of fifteen days in the period during which they could be legally taken in the year 1942.

GEESE:—The areas in which favourable wild goose shooting is available in this Province are extremely few and scattered. The best sections possibly are those along the western shore of James Bay and in the extreme southwestern counties. Hunting of this species is regulated by provisions of the Migratory Birds Convention Act, and as in the case of wild ducks the period of open season was extended in 1942 for fifteen days, except in the Counties of Essex,

Kent and Elgin, where the extension was limited to two days, thereby permitting such shooting over New Year's Day (1943).

WOODCOCK:—These birds as a general rule are quite scarce throughout. There are but few sections in which they can be hunted with any degree of success, which areas may be stated as located in some of the counties along the shore of Lake Erie and one or two adjoining counties to the north thereof, as well as in a few of the eastern counties. The period of open season established by the Migratory Birds Convention Act which governs, viz:—October 1st to 31st, applied throughout the Province.

SNIPE:—It may be stated that this species as a general rule is not too plentiful, though there are some scattered localities in which successful hunting prevails, principally in the more southerly counties of the Province. The regulations for their protection and shooting thereof are provided by the Migratory Birds Convention Act, and in 1942 the bag limits were reduced from twenty-five per day to twenty per day and not more than two hundred for the season, which extended over a period of two months, from September 15th to November 15th in the northern division and from October 1st to November 30th in the southern division.

PLOVER:—Reports would indicate that plover are not at all plentiful in any section of the Province, and while some improvement was observed in a few sections, conditions generally were such that the protection of an entire closed season again prevailed throughout 1942 with respect to this species. As in the case of wild ducks, wild geese, woodcock and snipe the regulations which apply are provided under the Migratory Birds Convention Act.

FUR-BEARING ANIMALS

The following information with reference to the various species of fur-bearing animals which inhabit Ontario has been assembled from reports submitted by members of the Departmental Field Service Force:—

BEAVER:—In the southwestern and southeastern counties these animals are not at all plentiful due to the lack of favourable habitation. In the remaining sections, and more particularly to the north, there is every indication that beaver are fairly plentiful, with some improvement in their numbers being reported from numerous areas. This condition may be attributed in some measure to the protection they have received in past years when a complete closed season prevailed and in more recent years when only a limited period of open season has been provided in suitable areas during the first part of December. A regulation was adopted which provided an open season from December 1st to 21st, 1942, for the taking of beaver in that portion of Ontario lying north and west of the French and Mattawa Rivers and Lake Nipissing (excepting therefrom the District of Rainy River and portions of the Districts of Kenora and Thunder Bay lying south of the main transcontinental line of the C.N.R. and west of the line of the C.N.R. running south-easterly from Superior Junction to Fort William), in the Districts of Manitoulin, Parry Sound, Muskoka and that portion of the District of Nipissing lying south of the Mattawa River, and in the Counties of Victoria, Haliburton, Peterborough, Hastings, Lennox and Addington, Frontenac and Renfrew. All persons who trapped beaver during this open season were required to have proper trapping licenses and each trapper was authorized to take not more than ten beaver. In addition, and in view of complaints regarding damage to property by beaver, an open season extending from November 1st to 30th, 1942, was provided in the county of Grey. Only residents of this county were permitted to trap during this open season, and each trapper was permitted to take not more than ten beaver. In this case the pelts were disposed of by the Department and the proceeds were remitted to the trappers concerned. Departmental returns show that

24,194 pelts were taken during these periods of open season, and it has been estimated that their value to the trappers was practically \$779,000.00. The average value of these pelts was almost fifty per cent in excess of that received for such pelts during the season of 1941.

FISHER:—These animals are practically non-existent in Southern Ontario, and they are extremely scarce in the northern portion of the Province. But few specimens are taken during the regular trapping season and there has been a steady annual decline in the catch.

FOX:—This species continued to be very plentiful throughout almost the entire area of the Province. This prevalence was responsible for a condition which was detrimental to the welfare of domestic poultry stocks as well as that of native game birds, with the result that enforcement officers were authorized by the Department to permit the hunting and trapping of foxes in southern Ontario for an additional fifteen days, or until March 15th, 1943, as a means of further reducing the numbers of these predators. Organized fox drives were carried on throughout the open season in many of the southern counties, while some Municipal Councils continued to pay bounty on foxes which were killed within the limits of such municipalities. There was a slight reduction in the number of red fox pelts which were taken during the year but increases were reported with respect to the number of cross fox silver fox and white fox pelts which were taken in the prevailing open season, though the three last mentioned varieties of this species are not at all plentiful anywhere in this Province.

LYNX:—This is another one of the species which are very scarce. As in the case of Fisher they are practically non-existent in Southern Ontario, and trappers are successful in taking but few specimens in the north. There is little variation in the numbers which are trapped from year to year.

MARTEN:—Continues to be extremely scarce. This is another species which has practically ceased to exist in the south portion of the Province. There has been a steady decline in the annual catch, no indications of any general improvement have been reported, nor does it appear that such improvement can be anticipated.

MINK:—Favourable conditions continued to exist quite generally throughout the entire Province, and trappers again were rewarded with a measure of satisfactory results from their operations for the taking of mink. This is one of the species contributing in an important way to the revenue derived by licensed trappers from the sale of pelts of fur-bearing animals taken by them, and the return from the sale of mink pelts taken during the 1942-43 season was exceeded only by such returns from the sale of muskrat and beaver. While it would appear from reports that the number of mink was about normal in the south, some increase in their number is reported from most sections of the north.

MUSKRAT:—While there was a decrease in the catch of muskrat taken during the period of the open season which prevailed in 1942-43 as compared with that of the previous season, it may be stated that insofar as this species is concerned fairly satisfactory conditions again prevailed. Due to varying conditions which exist in different sections of the Province, the limited period of open season which was provided by Regulation was established in these different sections to coincide with prevailing weather conditions which would be favourable to trapping operations. Muskrat pelts were again the principal source of revenue derived by licensed trappers.

It has been estimated that in 1942-43 more than \$1,446,000.00 was received by trappers from the sale of their muskrat pelts. This amount is slightly in excess of that derived from the same source in the previous year, notwithstanding the fact that the total number of pelts taken was 80,000 less. The sum referred to represents forty per cent of the total proceeds derived by trappers from the sale of all pelts taken in their trapping operations.

OTTER:—This species is not at all plentiful anywhere in Ontario, and there would appear to be little, if any, change. There was a decrease in the number which were taken by licensed trappers during the open season which prevailed.

RACCOON:—These animals are to be found only in Southern Ontario. They are not at all plentiful, and there are but few sections in which even slight improvement has been in evidence. The number which is reported to have been taken during the open season which prevailed in the period under review would represent the average catch of more recent seasons.

SKUNK:—While these animals continue to be quite plentiful throughout the entire Province, there was a considerable decrease in the number taken and disposed of by trappers. The number reported taken is only slightly more than fifty per cent of the catch reported in the previous year. It is altogether probable that trappers generally are not greatly interested in this particular species.

WEASEL:—This species is reported to be fairly plentiful throughout Ontario. The number taken during the season shows a considerable decrease when compared with the previous season's total, and it is possible that the demand for weasel was not sufficient to encourage intensive trapping operations.

The following comparative table shows the numbers of pelts of the several varieties of fur-bearing animals taken by licensed trappers, and which were either exported or dressed, in each fiscal year since 1939-40:—

	1939-40	1940-41	1941-42	1942-43
Bear	295	274	384	288
Beaver	33,530	21,605	25,197	24,194
Fisher	1,382	858	884	691
Fox (Cross)	981	722	1,780	2,649
Fox (Red)	19,925	15,059	32,215	31,297
Fox (Silver or Black)	101	67	206	265
Fox (White)	36	91	114	185
Lynx	514	383	537	552
Marten	1,790	1,439	1,652	1,417
Mink	36,518	38,976	63,996	60,331
Muskrat	689,706	739,224	722,387	642,810
Otter	4,101	3,931	3,880	3,557
Raccoon	14,493	11,973	13,499	13,420
Skunk	74,176	72,005	94,656	48,337
Weasel	95,832	53,719	80,776	62,553
Wolverine	2	2	3	6

From information supplied to the Department by licensed fur-dealers it has been estimated that the value to the trappers of the pelts taken during 1942-43 was \$3,545,937.52. The principal species contributing to this total in the order of their importance were muskrat, beaver, mink and the several varieties of fox, the returns from these pelts being ninety per cent of the entire total value.

Pelts taken from animals raised on licensed fur farms, viz:— silver or black fox, cross fox, blue fox and mink, and disposed of during the year by the operators of such fur farms, were estimated to have realized the sum of \$1,489,501.45, an increase of more than \$450,000.00 as compared with the results of operations in the preceding year, and thus making the value of the total fur production of the province for the year 1942-43 the sum of \$5,035,438.97, as compared to a total of \$4,207,144.53 for the year 1941-42.

FUR-FARMING

A declining market for raw furs during the pelting season in the fall of 1941, an increasing cost of feed and a scarcity of necessary help caused some further recession in the fur farming industry in the year under review. During this period there were some 1,475 fur farmer's licenses issued, a net decrease of nine per cent. In spite of the unfavourable prospects mentioned 154 of these licenses were for newly established fur farms.

As is indicated in the following table, mink and foxes are and have continued to be the principal species propagated. Experiments in connection with the raising of fisher, marten, muskrats and beaver were negligible and devoid of definite results. Mink were raised on 981 farms, and while silver foxes are still the principal other species, there is considerable interest being displayed in the new type foxes, i.e. white marked foxes which were raised on 122 fur farms, and platinum foxes which were raised on 62 fur farms.

BREEDING STOCK ON LICENSED FUR FARMS

as at January 1st.

	1940	1941	1942	1943
Beaver	4	13	18	21
Fisher	27	26	16	15
Cross Fox	168	134	112	68
Red Fox	96	65	73	96
Silver Black Fox	18,327	16,034	15,630	12,901
Blue Fox	209	397	644	595
*Platinum Fox				125
*White Marked Fox				1,379
Lynx	2	2	2	2
Marten	19	16	19	15
Mink	31,989	34,277	38,650	29,345
Muskrat	235	179	119	52
Otter	2	2	0	0
Raccoon	243	139	124	121
Skunk	10	7	5	2

*New type foxes previously included with silver black foxes.

Transactions undertaken by fur farmers during the year 1942-43 as recorded with the Department, show disposition of pelts from stock raised on such licensed premises, as follows:

85,493 Mink, 79,244 of which were exported, and the remaining 6,249 dressed within the Province.

27,563 Silver Black Foxes, 18,254 of which were exported and the remaining 9,309 dressed within the Province.

1,333 Blue Foxes, 1,296 of which were exported, and the remaining 37 dressed within the Province.

166 Cross Foxes, 122 of which were exported, and the remaining 44 dressed within the Province.

CROWN GAME PRESERVES

During the period under review the only addition which was made to the system of Crown Game Preserves prevailing throughout the Province was the establishment of an area in the District of Patricia as a beaver sanctuary. This area is designated as the Albany River

Beaver and Fur Preserve. The boundaries may be generally described as follows:—on the north the Albany River, on the west the Chipie River, on the south the Kwataboahegan River, and on the east the westerly shore of James Bay. The regulation which governs was provided at the request of the Department of Mines and Resources for the Dominion of Canada to permit of the restocking of the area with beaver, and to control the annual take of beaver therein, if and when such trapping is authorized, and to provide a restricted and controlled trapping ground for the benefit of resident Indians. This is the third such sanctuary so established.

The system of Regulated Game Preserve Areas which has been in effect during recent years was extended to include the Township of East Oxford in the County of Oxford.

WOLF BOUNTIES.

The following is a comparative statement showing annual wolf bounty statistics and payments for a period of four years ending with the 1942-43 fiscal period:—

Period	Timber	Brush	Pups	Total	Bounty and Expenses
For the year ending March 31, 1940	1,107	614	22	1,743	\$25,058.12
For the year ending March 31, 1941	738	400	8	1,146	16,477.43
For the year ending March 31, 1942	1,199	577	37	1,813	40,593.77
For the year ending March 31 1943	935	497	32	1,464	33,606.62

Various factors have influenced the prevalence of wolves and the number taken, including the basic rate of bounty, enlistments in the armed forces and employment in war industries, and the abundance of game, but weather conditions would appear to be the most important. The winter of 1942-43 was exceptionally severe and during this period only 714 wolves were taken. Generally speaking fifty per cent of the wolves are snared and the special wire required for this purpose is not available at present.

SUMMARY OF WOLF BOUNTY CLAIMS

County	Timber	Brush	Pups	Total
Brant	0	1	1	2
Bruce	8	18	0	26
Frontenac	8	9	5	22
Haldimand	0	1	0	1
Halton	0	2	0	2
Hastings	9	1	0	10
Lambton	0	1	0	1
Lanark	1	0	0	1
Leeds	0	1	0	1
Lennox & Addington	10	13	0	23
Lincoln	0	1	0	1
Norfolk	0	9	0	9
Northumberland	0	1	0	1
Ontario	1	3	0	4
Perth	0	1	0	1
Peterboro	11	0	0	11
Prince Edward	0	1	0	1
Renfrew	26	5	0	31

Simcoe	3	8	5	16
Victoria	1	8	0	9
Welland	0	2	0	2
York	0	2	0	2
	—	—	—	—
Total in Counties	78	88	11	177
	—	—	—	—

District	Timber	Brush	Pups	Total
Algoma	68	72	6	146
Cochrane	19	1	0	20
Haliburton	20	0	0	20
Kenora	271	70	2	343
Manitoulin	20	45	8	73
Muskoka	26	4	0	30
Nipissing	65	13	0	78
Parry Sound	58	5	0	63
Patricia	67	7	0	74
Rainy River	82	59	0	141
Sudbury	76	92	0	168
Temiskaming	4	1	0	5
Thunder Bay	85	47	5	137
	—	—	—	—
Total in Districts	861	416	21	1,298
	—	—	—	—
Grand Total	939	504	32	1,475
	—	—	—	—

There were 1,120 claims submitted in respect to 1,475 wolves. These, together with four claims in respect to 4 wolves outstanding as at April 1st, 1942, were considered. Fourteen claims with respect to 15 wolves were rejected for the following reasons:—8 of the pelts were domestic dogs, 1 was a red fox, on 4 pelts insufficient evidence was produced, and 2 of the wolves from which pelts were submitted were not killed by the applicants making the claims.

Information assembled from the applications for bounty which were forwarded to the Department shows that 449 of these wolves were destroyed by farmers, 715 by Indians and trappers, 203 by hunters, rangers, guides and tourist outfitters, and the remainder by miscellaneous persons.

Previous to November 1st, 1942, these wolf pelts were returned to the respective persons who had taken the same, but the regulation which provided for such disposition was repealed on the date mentioned, since when such pelts have been delivered or made available to the Seamen's Fur Vests War Project for manufacture into garments for sailors, both in the Naval Service and Mercantile Marine. The number of wolf pelts of which such disposition was made during the period between November 1st, 1942, and March 31st, 1943, was 1,005.

Reporting in connection with this endeavor by the Seamen's Fur Vests War Project, Mr. Alexander D. Schatz, Chairman of the Ontario Division, stated in a letter to this Department:—

"We take pride in pointing out that this voluntary War Effort on the part of the Fur Industry of Ontario had the fullest support and co-operation of employers and workers, as well as the generous assistance of Institutions, Organizations and numerous individuals."

Of interest in this connection is the following letter addressed to the Seamen's Fur Vests War Project by the Commanding Officer of one of the vessels in the Canadian Naval Service:—

"Not so long ago 25 Fur-lined Jackets came aboard this ship. Their arrival was watched with interest by members of the crew, most of whom had been out on the North Atlantic before, and knew just how cold it can get out there, and what protection your jackets afford. In due course they were distributed, and once again the eager eyes were evident.

If you could come aboard some night when we are at sea and watch how your Jackets are passed about by members of the crew going on and coming off watch, this letter of thanks would not be necessary. Each member of the crew stands 8 hours on watch duty per day, but your Jackets are on 24 hours duty.

On behalf of the ship's company, I wish to take this opportunity to thank your organization for this splendid and much appreciated gift."

GENERAL

TOURIST OUTFITTERS:—

Further rationing of gasoline and additional travel restrictions or other difficulties attributable to present war-time conditions again had an adverse effect on the tourist traffic to and within the Province. Many of the tourist outfitters' camps were affected by these conditions, particularly those catering to the transient tourist and those which are accessible only to road traffic. It may be stated that such unfavourable conditions were responsible for the reduction in the number of tourist outfitters' camp licenses which were issued to cover operations during the year under review, viz:—615, which number was 50 less than the number of such licenses issued for the previous year. Of these licenses 565 were issued in favour of resident operators and the remaining 50 in favour of non-resident operators.

These camps are located in districts set forth in the following tabulation:—

Algoma	87
Cochrane	7
Kenora	144
Manitoulin	50
Nipissing	86
Parry Sound	100
Patricia	2
Rainy River	42
Renfrew	14
Sudbury	54
Temiskaming	7
Thunder Bay	22
Total	615

BEAR BOUNTY:—

The Order-in-Council which governed the payment of bounty on bears was dated the 19th of August, 1942, and was applicable to bears killed during the period between August 1st and November 30th, 1942. This bounty was paid on a total of 364 bears which were destroyed

in accordance with the provisions of this Order-in-Council. Applications for the payment of bounty on an additional 22 bears were refused for various reasons, the principal reason being that the bears had been destroyed in Townships which were not in the proper classification regarding agricultural development, and this condition applied in respect to 14 bears. Rejection of claims was also made for the following reasons:—

2 killed before August 1st, 1942.

4 killed by persons not residents of the Township in which the bears were killed.

1 killed in a Crown Game Preserve.

1 killed by a person other than the applicant.

Grateful acknowledgement is made of the valuable co-operation of Agricultural Representatives and other officials of the Department of Agriculture who provided the necessary information to enable our Department to determine which Townships were within the classification stated in the Regulation, i.e., those in which not less than twenty-five per cent of the total area was devoted to agriculture.

The following statistical table indicates the total number of bears killed in each of the Districts and Counties, and in respect of which applications for the payment of bounty were submitted:—

County or District	Total
Algoma	10
Cochrane	20
Kenora	6
Manitoulin	7
Muskoka	12
Nipissing	37
Parry Sound	32
Rainy River	10
Sudbury	43
Thunder Bay	79
Temiskaming	24
Haliburton	12
Bruce	7
Frontenac	8
Hastings	23
Lennox & Addington	6
Peterborough	3
Renfrew	44
Victoria	3
	<hr/>
	386
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GAME AND FISHERIES ACT:—

Amendments to the Game and Fisheries Act which were adopted by the Legislative Assembly provided:—

- (a) For the exportation by non-resident anglers of the lawful catch of one day's fishing or the lawful catch of two days' fishing in the case of commercial fish taken from Great Lakes.

- (b) That the provision of Section 65 (Trespass) would not apply in the case of persons travelling on water with fishing tackle so encased or dismantled as to prevent its use while in transit.

Regulations additional to those already referred to in other portions of this report were adopted, and provided:—

- (a) An open season for black and grey squirrels in Southern Ontario, on November 5th, 6th, and 7th, 1942, with a bag limit of five per day.
- (b) That it would be unlawful for any person to take minnows in excess of a total weight of forty pounds from the waters of Lake Simcoe and Lake Couchiching, during the period from October 1st, 1942, to March 31st, 1943.
- (c) That it would be unlawful to hunt deer or moose in the open season in the territory lying within one and one-half miles on either side of Highway No. 70, between Kenora and Fort Frances.
- (d) That certain Townships in the District of Algoma, as enumerated, be transferred from Division "C" to Division "B" for the purpose of the open season for deer and moose.

ENFORCEMENT

Enforcement of provisions of the Game and Fisheries Act and other legislation which has been provided for the protection of game and fish in Ontario, such as the Migratory Birds Convention Act and the Dominion Special Fishery Regulations, is assigned to the regular staff of Game and Fisheries Overseers, and the services performed by the members of this branch of Departmental services play an important part in maintaining and improving our efforts towards the conservation and preservation of the game and fish resources of this Province. These services are augmented by the co-operation provided throughout the year by members of the Ontario Provincial Police Force, and by the services of seasonal overseers who are engaged periodically, but more particularly for the purpose of providing additional patrol services through the critical fish spawning periods in the spring of the year. Considerable assistance is also received from the many hundreds of interested persons who voluntarily act as Deputy Game and Fishery Wardens, without remuneration, under the authority of their annual appointments. Quite a proportion of these Deputy Game Wardens are appointed on the recommendation of the Municipal Councils of the Townships which have been established as Regulated Game Preserve Areas and for the most part these appointees are active only in the Townships in which they reside.

The duties of the officers to whom is entrusted this work of enforcement are greatly assisted by reason of the active co-operation received by them from the majority of sportsmen who in more recent years have become convinced of the necessity for proper observance of the various provisions of the Game and Fisheries Act which are essential for the adequate protection and conservation of this division of our natural resources. Such a satisfactory condition is to a very great extent attributable to the educational programmes undertaken by the Fish and Game Protective Associations, and other organizations having similar objectives, and which associations and organizations now exist in practically every section of Ontario.

Nevertheless it is still true that there are occasions on which it is necessary for our enforcement officers to make seizures and undertake subsequent prosecutions for offences involving violations of provisions of this protective legislation.

During the period covered by this report the seizure of articles from offenders was reported in a total of 1448 cases. Such seizures were made by Game and Fisheries Overseers

in 1272 cases, by Deputy Game and Fishery Wardens in 45 cases, by Provincial Police Constables in 25 cases and by members of various Municipal police forces in 20 cases. Co-operative action by Overseers, Deputy Game Wardens and Provincial Police resulted in seizures in 63 cases, and in the remaining 23 cases by co-operative action on the part of Overseers and members of Municipal Police Forces

The following is a summary of the articles which were confiscated in these seizure cases:

Live animals and birds	in 3 cases
Birds, game animals and meat	in 225 cases
Fire-arms and ammunition	in 668 cases
Fish	in 174 cases
Nets and fishing equipment	in 137 cases
Angling equipment	in 113 cases
Pelts and hides	in 261 cases
Traps and trapping equipment	in 86 cases
Motor boats, rowboats, canoes	in 19 cases
Outboard motors	in 5 cases
Motor vehicles	in 7 cases
Flashlights and lanterns	in 22 cases
Spears	in 43 cases
Miscellaneous articles	in 57 cases

The apparent discrepancy as between the actual number of cases in which seizures were reported and the total of the above summary would be accounted for by reason of the fact that in many of the instances a combination of articles was seized, such as fire-arms and game, nets and boats, fishing tackle and fish, pelts and traps, spears and artificial lights, and so forth.

Details of the fire-arms which were confiscated are as follows:—single-barrel shotguns 87, double-barrel shotguns 82, automatic shotguns 4, repeating shotguns 44, 410 gauge shotguns 12, combination shotgun and rifle 3, 22 calibre rifles (various types) 337 heavy calibre rifles 85, .25-20 calibre rifles 13, revolvers 6, and air guns 25.

Confiscated pelts of fur-bearing animals were as follows:—291 beaver, 3 fisher, 34 fox, (Silver Black, cross and red), 1 lynx, 160 mink, 800 muskrat, 13 otter, 35 raccoon, 15 skunk, 79 squirrel, 90 weasel as well as 66 deer and moose hides.

The miscellaneous articles which were seized included two axes, two bicycles, 316 duck decoys, eight ferrets, seven grappling poles, two hounds, fifteen packsacks and haversacks and two trunks or suitcases.

With reference to prosecutions, charges were laid in 1210 cases. This action resulted in convictions and the imposition of penalties in 1,146 of these cases. The charges laid were dismissed by the presiding magistrates in 54 of the remaining cases, while in the balance of 10 cases the charges were withdrawn. In the cases in which convictions were registered, the informations were laid by Game and Fisheries Overseers in 1,085 instances, by Provincial Police in 22 instances, by joint action by Overseers and Provincial Police in 8 instances, by Municipal Police in 24 instances, and by private land-owners (trespass) in 7 instances. In actions which were dismissed the informations were laid by Game and Fisheries Overseers in 46 instances, by Provincial Police in 1 instance, and joint action in 7 instances. Charges were withdrawn in 9 instances by Game and Fisheries Officers and in 1 instance by the Provincial Police.

REPORT OF THE FISH CULTURE BRANCH

Fish cultural operations were carried on during the year in twenty-seven provincial government hatcheries and rearing stations. Due to wartime conditions there was no expansion of the hatchery system to include new plants, and only proper maintenance and essential repair work were undertaken.

THE CULTURE AND DISTRIBUTION OF FISH

A detailed account of distribution of hatchery reared fish by county or district, species, age-class, and number planted is given in appendices I and II. In the following paragraphs, comparison of the year's distribution with that of the previous year and other pertinent data are given. The total output of all species for the year was approximately 14% higher than in 1941-42.

Speckled Trout:

The distribution objective was 3,000,000 speckled trout yearlings, but the year's total was somewhat lower, namely 2,918,500. Due to congestion at the Dorion Trout Rearing Station it was necessary to plant a fairly large number of fingerlings, namely 380,000. For the same reason smaller numbers were planted from Hill Lake, Sault Ste. Marie, Chatsworth and Codrington. The private hatchery at Caledon had approximately 170,000 fingerlings which could not be accommodated; these were distributed as effectively as possible in suitable and publicly fished waters. On the whole, approximately 60% more fingerlings were planted as compared with the preceding year.

Brown Trout:

The production of brown trout yearlings was 3.8 per cent. greater than that of the preceding year.

Rainbow Trout:

Distribution of rainbow trout yearlings was 9.8 per cent. greater than in 1941-42.

Kamloops Trout:

This species was introduced to a number of carefully selected lakes in Ontario, and it promises to provide excellent game-fish possibilities, at least in some of the lakes chosen.

During the year 24,800 yearlings were planted as compared with 25,000 in 1941-42.

Lake Trout:

Due to inclement weather which occurred during the lake trout spawning season in the fall of 1942, the egg collection was somewhat reduced. As a result the distribution of fry and fingerlings for the year under discussion was correspondingly reduced. The total production of eyed eggs, fry and fingerlings was 18 per cent. less than that of the preceding year. However, over 10,680 yearling lake trout were planted, which should have a compensatory and equalizing effect.

Whitefish:

The number of whitefish planted was approximately 5 per cent. greater than that of the preceding year.

Herring

The collection of herring eggs at Glenora and Kingsville hatcheries was more than twice that of the preceding year, an increase of 114 per cent.

Yellow Pickerel (Pike-perch):

A favourable increase of 32 per cent. over last year's distribution of eyed eggs and fry of yellow pickerel was realized.

Small-mouthed Black Bass:

One of the main annual objectives as regards bass culture is to increase the output of bass fingerlings by using all the facilities available as effectively as possible. In this we were successful to the extent of increasing by 4 per cent the previous year's output.

Large-mouthed Black Bass:

The culture of large-mouthed bass in two ponds at the Mount Pleasant hatchery was a success. Compared with the preceding year's production, the percentage increase of fry and fingerlings was 68 per cent. and 8 per cent. respectively.

Yellow Perch:

Annual collections of perch spawn from Lake Erie in the vicinity of the Kingsville hatchery vary greatly in abundance from year to year. Although 24,000,000 fry were planted this year this number was 24 per cent less than that of the preceding year.

Maskinonge:

Compared with the preceding year there was a decrease of approximately 25 per cent. in the distribution of fry, and 53 per cent. in the distribution of fingerlings.

Weather conditions have a pronounced effect on successful spawning and hatching of maskinonge. The spawning, hatching and feeding seasons in 1939 and 1940 were good, because the seasons were late, followed by mild and favourable weather. Changeable weather following an early opening is decidedly unfavourable.

The effect of weather conditions is most striking on the spawning grounds in the Pigeon River. The Pigeon River receives considerable warm surface water from the surrounding land, opens early and provides a maskinonge spawning season of comparatively short duration. A short spawning season, generally speaking, reduces the percentage hatch. On the Lakfield spawning grounds, conditions are quite different. Owing to the large body of ice which forms in Stony Lake each winter the spawning season for maskinonge is later, and the hatchability and general condition of the eggs are much better.

Reduction in the number of maskinonge fingerlings may also be attributed to weather conditions. Unsatisfactory weather conditions interfere with the spawning of suitable minnows, resulting in a poor yield and retarded growth of the minnows. When live minnow food, which is the most important item in the diet of maskinonge fingerlings is interfered with the normal growth and production of maskinonge suffer.

CLOSED WATERS

Establishing closed water areas is one of the practical methods employed in maintaining and improving the fishing in our lakes and streams. The closed area acts as a source of supply for replenishing the immediately adjacent open area with the natural increase **provided** year after year. If closure is continuous the area becomes a sanctuary of very great practical value.

The waters in the following list were closed during the year April 1, 1942, to March 31, 1943, to supplement those already closed:

ADAM LAKE

Unorganized territory north of Clay Lake between Fluke Lake and Segise Lake, District of Kenora. Closed for maskinonge propagation. Adam Lake is a feeder of Clay and Segise Lakes.

GEORGIAN BAY (Portion located as follows:)

- (a) An area approximately 1 mile square lying west of Electric Island;
- (b) An area approximately 1 mile square lying west of Lot 51, Concession VIII, Township of Harrison, District of Parry Sound;
- (c) An area lying east of and extending approximately 2 miles along the shore line opposite Concessions XIII and XIV, Township of Harrison, District of Parry Sound.

HARVEY CREEK (Nogie's Creek)

Townships of Galway and Harvey, County of Peterborough. Sanctuary for maskinonge.

LUKINTO LAKE

Unsurveyed territory, 12 miles east of Longlac, and 6 miles north of Seagram, District of Thunder Bay. Closed to provide additional protection for speckled trout.

MASKINONGE CREEK

Part of Maskinonge Lake, and part of Little Vermilion Lake, Townships of Pickerel and Vermilion, District of Kenora. Closed to provide additional protection for maskinonge with a view to maintaining and if possible increasing the supply of maskinonge by natural means.

TASSO, CAMP, BLUE AND CLEAR LAKES

Township of Finlayson, District of Nipissing. Closed to protect trout during winter months.

TWELVE MILE CREEK

Townships of Nelson and Trafalgar on certain specified lots and concessions, County of Halton. Closed to provide protection for small-mouthed black bass so that the closed area will help to replenish adjacent areas of the river from year to year.

WHITEFISH, CLEAR, PORTAGE AND BIG JOSEPH LAKES

Township of Humphrey, District of Parry Sound. Closed to winter fishing to protect lake trout.

REMOVAL OF COARSE FISH

Hoop nets were operated at the outlet of Charleston Lake for the purpose of removing ling. Owing to changeable weather conditions the spawning run was small, although the spawning period was more prolonged. The total catch of ling was 1,100.

Similar work was undertaken on Otty Lake, Township of North Elmsley, County of Lanark. The total catch was 368 ling, weighing about 3 lbs. each, or a total weight of 1,104 lbs.

The purpose of operations on Loughborough Lake and West Rideau Lake was to remove quantities of whitefish and herring, and coarse fish. A trap net was set in Loughborough Lake but only catfish were taken. After sounding and determining the type of bottom, pound nets were set on what was considered the best whitefish grounds in West Rideau Lake. Trap nets were also set on suitable whitefish grounds and the fish taken were game fish and ling, the former being liberated and the latter turned over to fox farmers in the district. From November 15 to November 26, 1942, the following fish were taken from West Rideau Lake: 308 lbs. of whitefish, 514 pounds of catfish, and 12,228 lbs. or approximately 6 tons of ling.

All the operations were under the direct supervision of local overseers or the hatchery supervisor. Nets and other equipment were supplied by the Department and considerable assistance was given by local residents. The whitefish and catfish were sold at a very nominal price, and the ling were disposed of to local residents and fox farmers.

BIOLOGICAL SURVEYS

At frequent intervals from April 27 until June 26, a study of the spawning of small-mouthed black bass, Long Point Bay, Lake Erie, was undertaken. It was not until June 23 that the first small-mouthed fry were taken off the nests. The study indicated the danger of opening the season too early without substantial evidence of spawning conditions.

A study of two quarry ponds at Hagersville and a small pond at Guelph was made.

For the most part, technical studies were confined to the hatcheries and rearing stations in connection with the care and feeding of the fish reared therein.

The Ontario Fisheries Research Laboratory of the Department of Zoology, University of Toronto, continued field and laboratory studies in Algonquin Park, limiting the work to the more urgent and important needs of fish culture.

In co-operation with the Park Staff, 60,000 speckled trout yearlings, provided by the Ontario Department of Game and Fisheries, were distributed as recorded in appendix I under the District of Nipissing.

Another measure for the maintenance of good fishing is the alternate closure of lakes to fishing, which was initiated in 1938 and has been continued as shown by the following table:

Year	Number of lakes closed
1938	4
1939	5
1940	24 (the 21 reported for 1940 and 1941 should read 24)
1941	17
1942	20

The creel census is proving to be the most successful means of determining the trends in the abundance of game fish and although it does not give a complete record of the number of fish taken it is a measure of both the total number taken and their availability or the number taken per hour by anglers. Where the creel census is carried on continuously for the same lakes and streams over a number of years it indicates the results of uncontrolled or unlimited angling, angling under controlled conditions as by alternate closure of lakes and other remedial measures, such as stocking and introduction of forage fish which are being applied as major experiments in fish culture. It is especially desirable to carry out the creel census as a war time activity, as it gives a measure of the influence of the war on the number of anglers, as well as information on the stocks of game fish which is a guide to post-war fish culture needs.

The following table gives a summary of the creel census records for lake trout and bass from those lakes in Algonquin Park for which information is available.

LAKE TROUT

Year	1936	1937	1938	1939	1940	1941	1942
Number of lake trout recorded	1414	3855	3083	4681	1827	2452	1832
Number of lakes for which anglers have reported	23	51	41	59	24	47	44

SMALL-MOUTHED BLACK BASS

Number of bass recorded	1202	1891	1694	1582	1640	1520
Number of lakes for which anglers have reported	4	8	11	15	14	18
Number of bass recorded from Lake Opeongo	688	731	270	404	494	217

During 1942 the creel census recorded the valuable information that numbers of whitefish were taken by anglers from Lake Opeongo and brown trout from Brewer Lake. The value of the creel census is in direct proportion to the co-operation received from anglers to whom much credit is due for their active participation without which this important measurement of fish culture work could not be carried out.

It has been found that the whitefish, perch and suckers constitute the most important lake trout food, particularly in Lake Opeongo. The small perch and perch fry are most important from midsummer into the fall, and studies of the feeding and food supply of this important forage fish have been continued.

The speckled trout living in the streams feed upon the aquatic insects which are present in great numbers and which include such well known forms as blackflies, midges, mayflies, caddis flies and stoneflies. There is a marked variation in the numbers from year to year which is shown by the following table giving the total insect emergence from one square yard of the same stream each year over a period of years.

Year	Total number of insects emerging from one square yard of stream
1937	13,385
1938	15,077
1939	10,836
1940	13,504
1941	11,343
1942	16,553

Under natural conditions beavers frequently build dams in trout streams and in stream improvement, dams and deflecting weirs are constructed to form deep pools of quiet water. Such dams or deflecting weirs create changes in streams which have a marked influence upon the insect fauna. The nature of this change is important insofar as it results in the production of different species and numbers of aquatic insects as compared to those present before such dams are built. It has been learned that the aquatic vegetation which often appears as the result of such dams definitely increases the number of insects, and further work is being carried out to determine whether the aquatic insects produced in this way are available to and constitute the food selected by the trout and to what extent the other conditions resulting from the dams are favourable or unfavourable to trout production.

Examination of the fish of the Park waters shows that some of them carry fish parasites and although none of these parasites are injurious to man they may be quite harmful to the fish. Much of the information from these studies is of value in the local fish culture work, as it has been learned that: the same species of fish in different lakes carry parasites of different kinds and degree of harmfulness which is a warning against indiscriminate transfer of fish from one lake to another. There is a relation between the fish parasites and the food, so that in a large lake fish in one area may be parasitized, while those in another area may be free of that particular parasite, which suggests a possible approach to parasite control. Lakes containing small-mouthed black bass had several species of fish infested with larval cysts of the cestode, *Proteocephalus ambloplitis*, while fish from lakes that do not contain small-mouthed black bass do not carry this cestode."

ACKNOWLEDGEMENTS

In closing this report I desire to express my appreciation of the excellent spirit of co-operation which has been displayed throughout the year by the Ontario Federation of Anglers and Hunters and its various constituent Game and Fish Protective Associations, and by the officials and members of the Northern Ontario Tourist Trade Association, as well as others who are interested in the services rendered by this department on behalf of hunters, anglers and trappers. Such contacts cannot but be of inestimable value and assistance to us in the performance of duties required in connection with the proper administration and conduct of the Department.

Regarding the work of the staff. May I state that members of the Departmental Service generally have been very conscientious in carrying out their duties and courteous in their contacts with the public in their efforts to produce the best results.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,
Deputy Minister of Game and Fisheries.

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
APRIL 1, 1942, TO MARCH 31, 1943.**LARGE-MOUTHED BLACK BASS****FRY**

Bruce	70,000
Huron	40,000
Lambton	20,000
Victoria	55,000
Total	185,000

FINGERLINGS

Haliburton	1,000
Lincoln	1,500
Muskoka	4,000
Nipissing	1,100
Simcoe	2,000
Victoria	6,000
Wentworth	1,500
York	2,000
Total	19,100

YEARLINGS AND ADULTS

Brant	15
York	175
Miscellaneous	100
Total	290

SMALL-MOUTHED BLACK BASS**FRY**

Bruce	60,000
Dundas	5,000
Elgin	60,000
Frontenac	55,000
Grenville	8,000
Grey	40,000
Hastings	27,500
Huron	20,000
Lanark	20,000
Leeds	30,000
Lennox-Addington	30,000
Manitoulin	105,000
Middlesex	60,000
Muskoka	120,000
Nipissing	100,000
Parry Sound	500,000
Peterborough	100,000
Prince Edward	15,000
Sudbury	25,000
Timiskaming	15,000
Waterloo	100,000
Wellington	40,000
Total	1,535,500

FINGERLINGS

Algoma	66,600
Brant	359
Cochrane	2,000
Durham	500

Frontenac	30,250
Haldimand	2,000
Haliburton	6,000
Halton	1,000
Hastings	9,000
Huron	1,000
Lanark	15,500
Leeds	13,000
Lennox-Addington	3,000
Manitoulin	233,500
Muskoka	21,000
Nipissing	18,800
Northumberland	2,000
Ontario	1,000
Oxford	1,000
Parry Sound	26,000
Peterborough	19,000
Renfrew	6,500
Russell	1,500
Simcoe	16,700
Sudbury	192,200
Thunder Bay	11,350
Timiskaming	2,000
Victoria	13,000
Waterloo	1,000
Welland	1,500
Total	718,259

YEARLINGS AND ADULTS

Brant	122
Hastings	822
Manitoulin	387
Parry Sound	358
Peterborough	558
Miscellaneous	108
Total	2,355

MASKINONGE**FRY**

Haldimand	10,000
Hastings	125,000
Leeds	15,000
Lennox-Addington	20,000
Manitoulin	10,000
Muskoka	65,000
Nipissing	40,000
Northumberland	180,000
Ontario	25,000
Parry Sound	30,000
Peterborough	705,000
Prince Edward	40,000
Renfrew	40,000
Simcoe	20,000
Stormont	15,000
Sudbury	25,000
Victoria	200,000
Waterloo	10,000
Total	1,575,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS,
April 1st, 1942, to March 31st, 1943—Continued

MASKINONGE—Continued

FINGERLINGS

Northumberland	165
Peterborough	440
Victoria	100
Total	705

MINNOWS

Haldimand	500
Total	500

PERCH

Lake Erie	23,175,000
Lake St. Clair (Mitchell's Bay).....	1,000,000
Total	24,175,000

PICKEREL

EYED EGGS

Exchange	1,000,000
Sale	200,000
Algoma	500,000
Bruce	1,275,000
Grey	200,000
Muskoka	1,500,000
Nipissing	3,000,000
Ontario	400,000
Rainy River.....	4,000,000
Simcoe	1,875,000
Sudbury	4,250,000
Wellington	250,000
Total	18,450,000

FRY

Algoma	14,310,000
Bruce	750,000
Carleton	2,500,000
Cochrane	2,700,000
Frontenac	8,600,000
Grenville	250,000
Haldimand	250,000
Haliburton	2,050,000
Hastings	4,750,000
Kenora	63,650,000
Kent	500,000
Lanark	6,400,000
Leeds	2,950,000
Lennox-Addington	4,700,000
Manitoulin	4,700,000
Middlesex	750,000
Muskoka	7,500,000
Nipissing	9,900,000
Northumberland	7,500,000

Parry Sound	18,300,000
Peterborough	11,850,000
Prince Edward	8,250,000
Rainy River	24,500,000
Renfrew	10,600,000
Russell	500,000
Stormont	250,000
Sudbury	9,050,000
Thunder Bay	1,000,000
Timiskaming	4,450,000
Victoria	3,450,000
Great Lakes	46,400,000
Total	283,310,000

BROWN TROUT

FINGERLINGS

Brant	12,000
Norfolk	1,000
Oxford	8,000
Miscellaneous	2,000
Total	23,000

YEARLINGS

Brant	24,600
Bruce	4,400
Durham	15,250
Elgin	25,800
Grey	29,400
Haldimand	2,400
Halton	24,600
Hastings	19,200
Huron	8,100
Lambton	1,000
Lincoln	2,800
Middlesex	5,300
Norfolk	46,000
Northumberland	12,800
Ontario	3,800
Oxford	15,300
Parry Sound	3,400
Peel	10,800
Perth	3,600
Peterborough	17,801
Simcoe	31,500
Waterloo	15,724
Welland	6,600
Wellington	12,000
Wentworth	3,600
York	13,500
Total	359,275

LAKE TROUT

EYED EGGS

Exchange	400,000
Total	400,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1942, to March 31st, 1943—Continued

LAKE TROUT—Continued

FRY	
Frontenas	87,000
Hastings	20,000
Lennox-Addington	42,000
Nipissing	5,000
Peterborough	63,000
Great Lakes	150,000
Total	367,000

FINGERLINGS	
Algoma	415,000
Cochrane	36,000
Frontenac	85,000
Haliburton	365,000
Hastings	159,000
Kenora	452,600
Lanark	38,000
Leeds	65,000
Lennox-Addington	31,000
Manitoulin	45,000
Muskoka	390,000
Nipissing	296,000
Parry Sound	335,000
Peterborough	10,000
Rainy River	449,000
Renfrew	50,000
Simcoe	112,500
Sudbury	245,000
Thunder Bay	145,000
Timiskaming	51,000
Great Lakes	11,554,500
Total	15,429,600

YEARLINGS	
Bruce	1,200
Grey	1,500
Nipissing	4,980
Timiskaming	3,000
Total	10,680

RAINBOW TROUT

FINGERLINGS	
Algoma	88,000
Manitoulin	5,000
Sudbury	18,000
Total	111,000

YEARLINGS	
Dufferin	1,800
Elgin	500
Haliburton	1,000
Norfolk	3,500
Simcoe	3,600
Waterloo	2,000
York	500
Total	12,900

KAMLOOPS TROUT

YEARLINGS	
Bruce	2,400
Grey	1,800
Muskoka	15,400
Parry Sound	5,200
Total	24,800

SPECKLED TROUT

FRY	
Miscellaneous—Sale	500
FINGERLINGS	
Algoma	16,700
Grey	23,875
Peel	170,000
Thunder Bay	379,200
Timiskaming	40,000
Miscellaneous	2,000
Total	631,775

SPECKLED TROUT

YEARLINGS	
Algoma	395,150
Brant	1,900
Bruce	11,840
Cochrane	145,800
Dufferin	15,500
Durham	21,800
Elgin	8,000
Frontenac	53,035
Grey	108,700
Haliburton	49,800
Hastings	101,500
Huron	4,050
Kenora	4,200
Lanark	21,200
Leeds	1,400
Lennox-Addington	47,200
Lincoln	1,500
Manitoulin	111,000
Muskoka	159,000
Nipissing	249,675
Norfolk	18,100
Northumberland	37,781
Ontario	3,800
Oxford	900
Parry Sound	96,100
Peel	8,000
Peterborough	54,990
Renfrew	99,050
Simcoe	24,800
Sudbury	415,350
Thunder Bay	424,942
Timiskaming	198,100
Victoria	3,100

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1942, to March 31st, 1943—Continued

SPECKLED TROUT—Continued

Waterloo	4,800
Wellington	7,200
York	2,000
Miscellaneous	7,250
Total	2,918,513

ADULTS

Algoma	5,313
Grey	175
Thunder Bay	2,039
Total	7,527

WHITEFISH

EYED EGGS

Thunder Bay	250,000
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FRY

Kenora	44,460,000
Manitoulin	13,000,000
Rainy River	17,500,000
Thunder Bay	1,000,000
Great Lakes	318,842,000

Total	394,802,000
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HERRING

FRY

Lake Erie	430,000
Lake Ontario	18,000,000

Total	18,430,000
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APPENDIX NO. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES — 1933 TO 1942, INCLUSIVE.

	1933	1939	1940	1941	1942
<i>Large-Mouthed Black Bass</i>					
Fry	57,500		230,000	110,000	135,000
Fingerlings		1,890	5,500	17,700	19,100
Yearlings and Adults	8,061	497	152	100	290
<i>Small-mouthed Black Bass</i>					
Fry	804,000	1,386,000	2,512,500	1,911,500	1,535,500
Fingerlings	169,800	226,325	449,154	691,925	718,259
Yearlings and Adults	7,738	7,739	1,671	2,254	2,355
<i>Maskinonge</i>					
Eyed Eggs		120,000			
Fry	2,005,000	2,675,000	2,345,000	2,100,000	1,575,000
Fingerlings		1,300	2,333	1,494	705
<i>Perch</i>					
Fry	59,150,000	72,360,000	13,000,000	31,600,000	24,175,000
<i>Pickereel (Yellow)</i>					
Eyed Eggs	2,012,500	7,000,000	2,000,000	4,500,000	18,450,000
Fry	271,567,500	327,500,000	393,887,000	223,490,000	233,310,000
Adults			100		
<i>Pickereel (Blue)</i>					
Fry	500,000				
<i>Brown Trout</i>					
Fingerlings		29,954	182,725	60,000	23,000
Yearlings	59,592*	375,070	252,000	346,183	359,275
<i>Lake Trout</i>					
Eyed Eggs	2,437,000	1,845,850	575,000	800,000	400,000
Fry	7,665,000	7,236,900	7,564,000	913,000	367,000
Fingerlings	10,575,200	9,964,400	7,312,100	13,066,400	15,429,600
Yearlings					10,680
<i>Atlantic Salmon</i>					
Fingerlings	4,800			46,385	
Yearlings					
<i>Rainbow Trout</i>					
Fingerlings	321,600	109,635	298,420	164,000	111,000
Yearlings	6,727	23,145	19,724	11,750	12,900
Adults		1,009			
<i>Kamloops Trout</i>					
Fingerlings	25,821	105,000		88,150	
Yearlings			26,500	25,000	24,800
<i>Speckled Trout</i>					
Eyed Eggs	1,000				500†
Fingerlings	373,314	337,000	611,375	394,000	631,775
Yearlings	2,083,538	2,976,559	3,278,114	3,060,174	2,918,513
Adults	4,452	6,315	7,150	16,732	7,527
<i>Whitefish</i>					
Eyed Eggs					250,000
Fry	323,700,500	326,657,000	403,339,000	375,960,500	394,802,000
<i>Herring</i>					
Fry	49,725,000	33,550,000	49,050,000	8,630,000	18,430,000
<i>Miscellaneous</i>					
		41			500†
TOTALS	733,265,643	799,496,629	886,995,903	672,960,876	763,750,279

†Minnows.

‡Fry.

*Yearling and adults.

APPENDIX

STATISTICS OF THE FISHING INDUSTRY IN THE PUBLIC WATERS OF
EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value \$	No.	Value \$	No.	Value \$	Yards	Value \$
Northern Inland Waters	624	3	35	10,500	156	81,040	243	12,902	499,560	63,828
Lake Superior	358	11	324	64,500	111	51,580	77	5,175	892,611	110,292
North Channel	123	5	110	29,800	38	19,075	31	1,640	348,050	44,119
Georgian Bay	349	13	347	96,956	114	106,872	126	5,075	1,364,877	162,174
Lake Huron	271	10	224	78,000	81	61,400	25	2,105	1,153,269	129,005
Lake St. Clair	95				37	12,935	58	3,545		
Lake Erie	814	44	615	281,400	154	200,900	117	9,030	2,147,000	291,565
Lake Ontario	528				208	116,940	110	4,644	1,266,200	129,261
Southern Inland Waters	174				10	2,605	83	3,855	3,000	700
Totals	3336	86	1,655	561,156	909	653,347	870	47,971	7,674,567	930,944

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickered (Blue)	Pickered (Dore)	Sturgeon
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	8,517	1,365,975	196,628	950,331	1,799	1,431,384	52,851
Lake Superior	1,392,450	319,655	1,360,971	17,682	9	91,898	2,204
North Channel	11,511	84,945	123,414	54,155		25,971	3,520
Georgian Bay	51,822	583,922	1,274,333	35,526	26	54,658	463
Lake Huron	362,441	113,865	800,095	535	1,269	175,802	5,646
Lake St. Clair				13,309	2,252	57,773	2,976
Lake Erie	61,789	2,524,009	50	30,776	4,405,014	421,281	14,924
Lake Ontario	1,086,876	441,993	89,820	53,244	27,729	11,185	5,899
Southern Inland Waters				3,213			
Totals	2,975,406	5,434,364	3,845,311	1,158,771	4,438,098	2,269,952	88,483
Values	\$240,963.56	\$1,081,522.28	\$706,513.27	\$82,005.04	\$487,636.20	\$290,436.40	\$40,534.58

NO. 3

THE PROVINCE OF ONTARIO, FOR THE YEAR ENDING DECEMBER 31, 1942.

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Freezers and Ice Houses		Piers and Wharves		TOTAL VALUE
No.	Yards	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	\$
			42	14,820	63	3,275	1	2	1,550	170	122	31,735	97	11,165	229,437
			50	20,625							67	19,630	56	12,290	284,092
			36	16,400					1	3	30	7,275	25	8,700	127,012
6	900	820	67	70,180	39	450	1	2	12,600	2,280	53	16,100	54	41,344	502,253
			97	62,900					3,300	600	48	21,325	16	4,435	359,770
19	5,000	3,650	110	14,650					3,900	301	20	6,575	9	2,575	44,231
37	10,025	7,350	518	280,250	10	2,000	18	90	1,200	34	111	158,200	83	27,930	1,258,749
8	735	820			364	9,945	3	15	2,100	100	33	6,940	31	6,755	275,420
40	3,420	6,015			178	4,396	20	114	1,150	27	14	1,645	4	485	19,842
110	20,080	18,655	920	479,825	654	20,066	44	226	25,800	3,512	498	269,425	375	115,679	3,100,806

NO. 4

FISH TAKEN

Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	TOTAL	VALUE
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	\$
	13,328	118,070	150	360	428,820	1,345	4,569,558	465,692.43
	795	10,900			165,896		3,362,460	285,038.76
	23,904	26,104	59	1,227	179,832	39	534,681	60,462.21
	3,774	58,419	4,471	29,672	66,371		2,163,457	398,911.63
	311,492	222,366	20,272	10,128	56,511	282	2,080,704	323,562.60
	33,001		96,680	133,315	258,719	207	598,232	53,036.56
313	964,981		61,270	235,373	1,317,391	749	10,037,920	1,388,337.01
15,734	210,994		60,616	219,570	263,957	15	2,487,632	365,043.33
2,531	3,175		72,128	211,949	253,127		546,123	31,886.65
18,578	1,565,444	435,359	315,646	841,594	2,990,624	2,637	26,380,767	
1,060.93	164,636.15	68,403.21	31,999.00	47,934.50	124,466.51	3,859.25		3,371,971.18

APPENDIX NO. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Species	1941 Pounds	1942 Pounds	Increase Pounds	Decrease Pounds
Herring.....	3,736,972	2,975,406		761,566
Whitefish.....	6,369,932	5,434,364		935,568
Trout.....	4,412,137	3,845,311		566,826
Pike.....	1,101,136	1,158,771	57,635	
Pickrel Blue.....	1,620,949	4,438,098	2,817,149	
Pickrel Dore.....	2,311,413	2,269,952		41,461
Sturgeon.....	99,348	88,483		10,865
Eels.....	18,675	18,578		97
Perch.....	2,460,181	1,565,444		894,737
Tullibee.....	640,153	435,859		204,294
Carp.....	983,595	841,594		142,001
Catfish.....	447,518	315,646		131,872
Mixed and Coarse.....	2,744,646	2,990,624	245,978	
Caviare.....	2,976	2,637		339
Total.....	26,949,631	26,380,767		*568,864

*Net Decrease

APPENDIX NO. 6

STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Species	Quantity Pounds	Estimated Value
Herring.....	2,975,406	\$240,963.56
Whitefish.....	5,434,364	1,081,522.28
Trout.....	3,845,311	706,513.27
Pike.....	1,158,771	82,005.04
Pickrel Blue.....	4,438,098	487,636.20
Pickrel Dore.....	2,269,952	290,436.40
Sturgeon.....	88,483	40,534.58
Eels.....	18,578	1,060.93
Perch.....	1,565,444	164,636.15
Tullibee.....	435,859	68,403.21
Catfish.....	315,646	31,999.00
Carp.....	841,594	47,934.80
Mixed and Coarse.....	2,990,624	124,466.51
Caviare.....	2,637	3,859.25
Total.....	26,380,767	\$3,371,971.18

APPENDIX No. 7

ESTIMATED VALUE OF FISH TAKEN FROM THE WATERS OF THE PROVINCE
1923 - 1942

1923	\$2,886,398.76
1924	3,139,279.03
1925	2,858,854.79
1926	2,643,686.28
1927	3,229,143.57
1928	3,033,944.42
1929	3,054,282.02
1930	2,539,904.91
1931	2,442,703.55
1932	2,236,573.50
1933	2,186,083.74
1934	2,316,965.50
1935	2,633,512.90
1936	2,614,743.49
1937	2,644,163.49
1938	2,573,640.97
1939	2,564,516.37
1940	2,226,418.18
1941	2,147,008.43
1942	3,371,971.18

Thirty-Seventh Annual Report

OF THE

Game and Fisheries Department

1943 - 1944

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER No. 9, 1945



TORONTO

Printed and Published by T. E. Bowman, Printer to the King's Most Excellent Majesty

1945

TO THE HONOURABLE ALBERT MATTHEWS,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Seventh Annual Report of the Game and Fisheries Department of this Province, for the year ending March 31st, 1944.

I have the honour to be,

Your Honour's most obedient servant,

G. H. DUNBAR,
Minister in Charge,
Department of Game and Fisheries.

TORONTO 2,
March 21st, 1945.

THIRTY-SEVENTH ANNUAL REPORT
OF THE
Department of Game and Fisheries of Ontario

TO: THE HONOURABLE G. H. DUNBAR,
Minister in Charge,
Department of Game and Fisheries.

SIR:

I have the honour to submit to you herewith the Thirty-seventh Annual Report of the Department of Game and Fisheries, in which is contained information with reference to the activities of the various Departmental services, and in which are included condensed statistics and comparative tables for the fiscal year ended March 31st, 1944, and other information which will probably be of interest.

INTRODUCTORY

The period under review found the nation still at war, and all of its resources directed towards crushing the forces of oppression which have threatened to overrun our democratic civilization. This deflection of the national economy from the usual channels of peace to the more urgent task of winning the war has added to the difficulties of administration and is reflected in certain branches of Departmental activity. Despite adverse conditions which have as a result prevailed the normal operations of the Department have been continued and maintained at a high level.

By reason of the urgency of the war effort, transportation difficulties and the shortage of ammunition sportsmen have not been able to indulge as freely as was possible in normal times in the twin sports of hunting and fishing. As a consequence it is quite likely that fewer fish were taken and less game destroyed thus leaving a larger adult stock for propagation purposes, and this should result in increased natural reproduction.

Education along conservational lines has been stimulated through the various campaigns sponsored by the many branches of Government and Industry, to promote economy in the use of available resources, and the careful salvage of every item that might be of value in the war effort. In any evaluation of natural resources it is now generally recognized that wild-life forms an important part of the total assets of the nation. It provides, among other things, food and clothing, and is the incentive to outdoor recreation which is conducive to health and good citizenship. For these reasons the wise use of such natural resources is imperative, and the protection thereof is a patriotic duty. It is no exaggeration to say that the public is more conservation minded to-day than ever before, and this attitude is of great importance and assistance to the Department in its efforts to maintain sufficient resources to meet demands which we have every reason to believe will increase following the cessation of hostilities.

The vast extent of the land and water area of the Province,—some 412,000 square miles,—embraces in its physical features every requisite for the development and perpetuation of our wild-life heritage. Its huge forest areas and wild lands; its rugged geological formations; its swamps and marshes, bounded by areas of rich agricultural land; and its sparkling lakes and free-flowing rivers; all these constitute an environment capable of sustaining an abundance of wild-life, provided the essentials of conservation are understood and practised. Such an extensive territory, however, presents many problems which add to the complexity of adminis-

tration. It involves extreme weather conditions, varied as to time and place; wild and sometimes inaccessible terrain; diverse land uses, often adversely affecting water conditions and natural habitat; and a multiplicity of destructive factors which must be continually kept under control. In administering this valuable inheritance the Department is guided by the necessity for protecting the capital stock, maintaining an adequate supply and ensuring an equitable distribution. These three phases are met by sound laws properly enforced, an extensive programme of fish culture operations, and adequate sanctuary for all classes of game. A complete resume of Departmental activities will be found herein.

FINANCIAL

Following is a summary of the revenue collected by the Department of Game and Fisheries during the fiscal year under review, and this statement also details the various sources from which these receipts were derived and the amounts attributable thereto.

REVENUE FOR THE FISCAL YEAR ENDING MARCH 31st, 1944

GAME—

Licenses—

Trapping	\$ 49,690.75
Non-resident hunting	89,450.00
Deer	115,395.90
Moose	4,697.00
Gun	75,152.65
Dog	6,808.00
Fur Dealers	30,130.00
Fur Farmers	6,370.00
Tanners	140.00
Cold Storage	213.00

\$ 378,047.30

Royalty 145,595.45

\$ 523,642.75

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 91,172.00
Angling	288,685.00

\$ 379,857.00

Royalty 11,971.45

\$ 391,828.45

GENERAL—

Licenses—

Tourist Camps	\$ 5,990.00
Guides	5,970.00

\$ 11,960.00

Fines 14,418.70

Costs Collected (Enforcement of Act) 584.40

Sales—Confiscated articles, etc. 27,087.41

Rent 3,342.00

Commission retained by Prov. on sale of lic. 1,973.20

Miscellaneous 235.69

\$ 59,601.40

Net ordinary revenue \$ 975,072.60

The total of \$975,072.60 is slightly in excess of the revenue which was collected by this Department in the previous fiscal year when the sum of \$962,350.89 was secured as a result of our operations. Notwithstanding the prevalence of the unfavourable conditions to which previous reference has been made it may be stated the collection of revenue was not too adversely affected.

Reference to fluctuations in comparison with the previous year may be of interest and the following comparisons are therefore detailed for information:—

Fees from the sale of non-resident hunting and angling licenses which in 1943-44 amounted to \$378,135.00 were \$21,373.85 less than the amount collected from the same source in 1942-43. This is a condition which resulted from circumstances over which we had no control and was a decrease, though not of a very substantial nature, which had been anticipated due to the difficulties of transportation and other conditions attributable to the necessity for devoting the utmost time and energy to the intensive prosecution of the war effort.

Details in connection with the issue of non-resident licenses are as follows:—

ANGLING

Individual (Seasonal)	27,314
Individual (Three-day)	27,622
Family	12,593
Manitoba Residents	699
Boys' Camp	13

HUNTING

Small game	1,605
Deer	1,782
General	504
Bear (spring season)	157

Other declines in revenue included \$29,098.01 from the sale of resident licenses to hunt deer and moose, and gun and dog licenses, more than \$27,000.00 of which total was due to the decreased revenue from the reduced sale of gun licenses, and this no doubt was by reason of the fact, among others, that certain types of sporting ammunition were not readily available to those interested in hunting. Fees from the sale of Tourist Outfitters' and Guides' Licenses decreased \$1,445.00 and penalties collected following convictions for violations of provisions of the Game and Fisheries Act and Regulations decreased \$3,261.10.

Details in connection with the issue of resident hunting licenses are as follows:—

Deer	31,067
Deer (Camp)	371
Deer (Farmers')	6,858
Moose	854
Gun	87,504

The item of revenue which showed the largest increase was the sum derived from the collection of royalties on the pelts of fur-bearing animals. These royalties are collected upon issue by the Department of permits to authorize the exportation from the Province or the dressing of such pelts. The amount collected from this source in 1943-44 was \$23,563.30 in excess of the sum derived from the same source in 1942-43. Fees from the sale of trapping and fur-dealers licenses in 1943-44 increased \$10,088.30 and \$3,842.00 respectively. This is a total increase of \$37,493.60 in revenue derived from the operations of those actively engaged in the raw fur industry.

The revenue derived from the commercial fishing industry, that is from the sale of fishing licenses and the collection of royalties, totalled \$103,143.45, which was \$18,636.13 in excess of the total received from the same branch in the previous fiscal period.

From the sale of articles confiscated from those convicted of offences against provisions of the Game and Fisheries Act we derived in 1943-44 the sum of \$27,087.41, an increase of \$12,308.16 over the previous years' revenue from the same source. This substantial increase would be attributable chiefly to the fact that the 374 beaver which were included in the sales of confiscated fur conducted in 1943-44 were superior to the 313 beaver sold in 1942-43 and the further fact that the public demand for such fur was reflected in increased market prices in 1943-44. The average price of beaver realized in the 1943-44 sale was \$37.00 as compared with an average price of \$16.00 in 1942-43.

During the year the total expenditures incurred by the Department, including both ordinary and capital amounted to \$574,525.05 and these were practically equal to the 1942-43 expenditures. Details of these expenditures are set forth in the following statement:—

EXPENDITURE FOR THE FISCAL YEAR ENDING MARCH 31st, 1944

ORDINARY—

Main Office	\$ 52,849.76
General	41,782.05
Enforcement	206,375.40
Game Animals and Birds	7,103.12
Macdiarmid	2,936.66
Biological and Fish Culture	204,043.51
Grants	5,400.00
Wolf Bounty	46,545 77
Bear Bounty	3,695.00
<hr/>	
Total Ordinary	\$ 570,731.27
Capital	3,793.78
<hr/>	
Total Expenditure	\$ 574,525.05

As compared with figures for the previous year the only important changes in the amounts shown in these various sub-totals is an increase of \$12,939.15 in the payments of wolf bounties and a decrease of \$10,845.93 in the expenditure made for the purchase of game animals and birds for use in connection with our re-stocking operations and the reasons for which are explained in other sections of this report. As has been the case in the past several years the most important items of our expenditures occur in connection with the maintenance of the field service engaged in providing enforcement of the Game and Fisheries Act and Regulations and for the operations of the Fish hatcheries throughout the Province and distribution of fish for the replenishment of fishing in suitable waters under the supervision of the Biological and Fish Culture Branch, both of which services are the subject of more detailed references further along.

The allotment for grants was distributed as follows:—\$2,500.00 to the Ontario Fur Breeders' Association to encourage their efforts to improve the Fur Farming Industry in Ontario; \$500.00 to Professor W. J. K. Harkness for use in his research work towards improving the practice which at present prevails in fish culture operations; \$500.00 to the Ontario Federation of Anglers and Hunters to be used in their programme to improve the practice of conservation and secure observance of the various provisions of the Legislation applicable to the sports

of hunting and fishing; and the remaining \$1900.00 in varying amounts was granted to Mr. Jack Miner, Mr. T. N. Jones and Miss Edith L. Marsh in appreciation of their services in providing sanctuary for migratory and native birds on their properties located in the counties of Essex, Elgin and Grey respectively.

As will be noted capital expenditures were rigidly restricted and were made simply to provide repairs and minor improvements to the fish hatchery properties at Southampton, Normandale, Wiarton and North Bay, to the Departments' property at the Macdiarmid fishing station on Lake Nipigon and to the bird farm operating at Normandale.

The favourable balance of revenue over expenditure for the year was \$400,547.55.

The following table details departmental revenue and expenditure for the fiscal years from and including the period which ended March 31st, 1936:—

	Revenue	Expenditure (Ordinary & Capital)	Surplus
1935-36	\$ 683,938.72	\$ 451,041.91	\$ 232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99
1941-42	1,183,269.29	576,762.26	606,507.03
1942-43	962,350.89	574,732.49	387,618.40
1943-44	975,072.60	574,525.05	400,547.55

GAME

Herewith is a summary of conditions as they apply to the various species of game animals and birds which are to be found in Ontario, and which information has been compiled from reports submitted by our field officers throughout the Province:

DEER:—In addition to the open seasons definitely established by provisions of the Game and Fisheries Act in the various divisions which prevail, special regulations affecting the deer season were adopted and created the following provisions, viz:—

(a) The open season in that part of Ontario lying south of the French and Mattawa Rivers and Lake Nipissing as defined in clause (d) of Section 7 of the Game and Fisheries Act, in 1943, extended from November 8th to 20th.

(b) An open season in that portion of the County of Carleton lying west of the Rideau River, from November 8th to 20th, 1943.

(c) An open season in the Counties of Bruce, Grey, Dufferin and Simcoe from November 15th to 20th, 1943. In this instance the use of dogs for the hunting of deer during this open season in these counties was not permitted.

(d) An entire close season throughout the year was provided to apply in the Township of Cambridge (Russell County) and in the Township of Howe Island (Frontenac County).

(e) In the following townships in the District of Algoma, viz:—Y, Z, 7Z, 5A, 6A, 7A, 5B, 6B, 7B, 5C, 6C, 7C, 5D, 6D, 7D, 5E, 6E, 7E, 5F, 6F and 7F, the open season was varied and in 1943 extended from October 15th to November 25th.

Advice from our field officers with reference to this fine species of game animal would indicate that as a general rule very favourable conditions prevailed during the period covered by this report. There were of course some exceptions, but this is not unexpected in an area so extensive as that which is comprised within the boundaries of the Province. There are many sections of Ontario in which settlement, industrial development and the lack of suitable environment and cover have resulted in necessary migration and the consequent diminution of deer herds which formerly inhabited such areas, but it can be safely stated that in those areas in which suitable and desirable habitat is to be found deer continued to provide satisfactory hunting for many thousands of our own hunters as well as for hundreds of visiting sportsmen from the United States who participated in the joy and pleasure which are derived from the recreation such sport provides.

These animals are reported to be plentiful in many sections of the northern portion of the Province, extending from Lake Nipissing in the east to the Lake of the Woods in the west, and the same conditions are reported from that portion of southern Ontario below the French and Mattawa Rivers, north of the southern boundary of the District of Muskoka and between the Georgian Bay and the Ottawa River.

They are also reported to be numerous and increasing in many of the southwestern and southeastern counties in which the complete protection of an entire closed season has been in effect for many years.

MOOSE:—This species is practically non-existent in the larger proportion of Southern Ontario. There are reports that specimens have been observed, though their numbers are very scarce, in Victoria, Hastings, Addington, Frontenac, Renfrew, Haliburton, Muskoka and Parry Sound, and little, if any, improvement has been observed. They are more prevalent in the northern portion of the Province, but it cannot be stated that they are more than fairly plentiful in any particular section. Improved conditions affecting this species are reported from some sections of the Districts of Nipissing, Temiskaming, Algoma and Kenora. The sale of hunting licenses for the taking of moose is quite limited as will have been observed in a previous portion of this report, which fact might be construed as an indication that such hunting is a branch of sporting activity which does not interest many sportsmen.

In addition to the open season for moose which is established by legislative authority, a special open season was declared by Regulation to be effective in that portion of the Districts of Nipissing, Temiskaming and Sudbury defined in sub-clause (1) of clause (b) of Section 7 of the Game and Fisheries Act to extend from October 15th to 30, 1943.

CARIBOU:—The protection which has been provided for this species in the way of an entire close season which has been in effect for the past several years throughout Ontario has unfortunately not resulted in any very noticeable improvement or increase in the number of the herds of caribou which inhabit this Province. They are extinct in southern Ontario and only from the Districts of Cochrane, Sudbury, the northern part of Algoma and Thunder Bay has their existence been reported and even in such instances it is stated by the officers concerned that they are few in number, with little, if any, improvement in their condition or numbers.

ELK:—Such of these animals as are to be found in Ontario at present are the result of efforts undertaken by this Department in past years to establish this species in the Province. The original stock was received from Western Canada through the co-operation of the National Parks Branch of the Federal Department of Lands, Mines and Resources. Some have been liberated in sections of Peterborough County, and in the Districts of Temiskaming (Township of French), Sudbury (Burwash Crown Game Preserve), Algoma (Chapleau Crown Game Preserve), and Thunder Bay (Nipigon-Onaman Crown Game Preserve).

Reports from most of these areas indicate some slight increase.

BUFFALO:—A small herd of buffalo was brought into Ontario from Alberta in 1939, and they were placed on the Burwash Crown Game Preserve. Improvement or increase has been negligible.

BEAR:—These animals are fairly plentiful throughout the northern portion of the Province and in the northern Districts of southern Ontario. While they do provide a measure of sport in which a goodly number of hunters participate, and in this connection it is interesting to note that such hunting in the months of April, May and June has an appeal for United States hunters who visit Ontario for this purpose, nevertheless this species has in more recent years become somewhat of a nuisance, particularly in some of the more thickly settled sections in the north, where they have been responsible for damage among domestic herds and flocks, and due to this very undesirable condition it has been necessary to provide a regulation to encourage the destruction of bears in such settled areas and under which regulation provision is made for the payment of a bounty on these animals which are killed in certain defined areas. Detailed results of the operations under this Regulation are included elsewhere in this Report.

RABBITS:—The three species of rabbit which are most prevalent in Ontario are the cotton-tail rabbit, the European Hare (or jack-rabbit), and the varying hare (or snowshoe rabbit). The cotton tail rabbit is found in most of the southern counties, the jack rabbit in the southwestern counties, and the snowshoe rabbit in the northern portion of the Province and in the northern districts and eastern counties of southern Ontario.

Reports to the Department indicate that as a general rule these animals were plentiful, though there were areas in scattered portions of the Province in which such conditions did not exist and in which these animals were reported to be not so plentiful and their numbers somewhat decreased. Information regarding diminished numbers of cotton-tail rabbits was received from a majority of counties in southeastern Ontario, and advice of similar conditions with respect to the snowshoe rabbit came from eastern counties as well as from some of the northern Ontario districts.

Generally speaking, rabbits continued to provide a goodly proportion of the desirable hunting which is available, particularly in the late fall and early winter months.

PARTRIDGE:—as a general rule reports were not so favourable regarding conditions applicable to the various species of partridge as had been the case in previous years, though they continued to be sufficiently plentiful to warrant the adoption of a regulation which provided for an open season for the taking of these birds. Two separate periods to constitute this open season were set out in the Regulation which governed, viz:—from October 2nd to 16th and from November 8th to 15th, 1943. The later period was in effect throughout the entire Province, excepting in Provincial Parks and Crown Game Preserves, and during the October period such hunting was prohibited not only in the Parks and Crown Game Preserves, but also in the Counties of Essex and Kent and in the Townships established as Regulated Game Preserve Areas, though in Essex, Kent and Lambton and the Regulated Townships provision was made for the hunting of partridge during the period which was provided in these areas for the hunting of pheasants. The general bag limit was five (5) birds per day, and not more than twenty-five (25) during the two periods.

HUNGARIAN PARTRIDGE:—There are but few sections in the Province in which these birds are to be found. They are reported to be not too plentiful in any particular area, and but little improvement has been observed. The sections in which they are most plentiful are the very extreme southwestern and southeastern coun-

ties. This species is not native to the Province and such birds as do inhabit suitable sections are the result of previous efforts on the part of the Department to establish this species in Ontario. Hunting of Hungarian Partridge provided by regulation was permitted only in the counties of Essex and Kent, on October 28th, 29th and 30th, 1943, with a bag limit of two (2) birds per day.

PHEASANTS:—The general policy of restocking suitable cover with English ring-necked pheasants was continued during the year under review, but an unfavourable condition on the breeding farms, much of which developed as a result of a serious lack of experienced help due to the demands of more necessary war services, was followed by reduced production and the consequent large decrease in the number of birds which was made available for purchase by the Department for this purpose. We are able to secure only a total of 7,404 pheasants to meet all our demands for general distribution and as a result the Department was greatly handicapped in its efforts to continue the previous policy. Extreme care was essential in the matter of allotting shipments as they became available, and while requirements could not be completed in any instance, officials in the Department who were responsible for the distribution displayed such a measure of diligence and care in the details of organization that most of the Regulated Township areas received some birds, even though the total required was not produced. This condition quite naturally made it necessary that there should be some curtailment in the open season which was provided and generally only two days' shooting was allowed in these Regulated Townships.

Pheasants totalling 6,512 were distributed among the various townships included in the scheme of Regulated Game Preserve Areas, 415 were liberated in the county of Essex and a similar number in the county of Kent, while 25 of these birds were placed in the Barkley Crown Game Preserve in the county of Dundas, and the remaining 37 were made available to the St. Catharines Branch of the Ontario Bird Dog Association.

Details of the distribution in the Regulated Townships are as follows:—County of Brant, (three townships,—Burford, South Dumfries and Onondaga), 180 birds; County of Elgin, (Five townships,—Aldborough, Bayham, Dorchester South, Dunwich and Malahide), 168 birds, 48 of which were adult birds; County of Haldimand, (eight townships,—Canboro, Dunn, Cayuga North, Cayuga South, Moulton, Seneca, Sherbrooke and Walpole), 690 birds; County of Halton, (four townships,—Esquesing, Nassagaweya, Nelson and Trafalgar), 495 birds; County of Lincoln, (eight townships,—Caistor, Clinton, Gainsboro, Grimsby North, Grimsby South, Grantham, Louth and Niagara), 743 birds, 19 of which were adult birds; county of Middlesex, (two townships,—Metcalf and Westminster), 92 birds, 37 of which were adult; County of Norfolk, (four townships,—Middleton, Townsend, Windham and Walsingham), 285 birds; County of Ontario, (three townships,—Pickering, Whitby East and Whitby West), 430 birds, 70 of which were adult birds; County of Oxford, (two townships,—Dereham and East Oxford), 98 adult birds; County of Peel, (five townships,—Albion, Caledon, Chinguacousy, Toronto and Toronto Gore), 540 birds; County of Prince Edward, (one township,—South Marysburgh), 41 birds; County of Welland, (eight townships,—Bertie, Crowland, Humberstone, Pelham, Stamford, Thorold, Wainfleet and Willoughby), 894 Birds; County of Wellington, (one township,—Puslinch), 105 birds, County of Wentworth, (eight townships,—Ancaster, Barton, Beverly, Binbrook, Glanford, Flamboro East, Flamboro West and Saltfleet), 675 Birds; County of York, (seven Townships,—East Gwillimbury, North Gwillimbury, King, Markham, Scarborough, Vaughan and Whitchurch), 1076 birds, of which 359 were adult birds. Except as is otherwise indicated all birds distributed were poults.

Provisions of the Regulations which governed the open season for pheasants were as follows:—

(a) Pelee Island, October 28th, 29th and 30th, 1943, between the hours of 8.00 a.m. and 5.00 p.m., each day. Bag limit of four (4) birds per day, one (1) of which was to be a hen. Hunters were required to have a special license issued by the Pelee Island municipal authorities, in addition to the regular hunting license.

There was an additional regulation provided which prohibited all hunting on Pelee Island from 6.00 p.m. October 21st until 8.00 a.m. October 28th, 1943, which was the first day of the open season detailed in the preceding paragraph.

(b) Township Regulated Game Preserve Areas, (except Aldborough, Plympton, Bayham, Dorchester South, Dunwich, Malahide, Marysburgh South, Metcalfe, Westminster, Middleton and Oneida), between the hours of 8.00 a.m. and 5.30 p.m. October 22nd and 23rd, 1943;

Aldborough Township, October 22nd, 1943, between the hours of 8.00 a.m. and 5.30 p.m.; and

Plympton Township, October 30th, 1943, between the hours of 8.00 a.m. and 5:30 p.m.

The bag limit was three cock birds per day. Hunters were required to provide themselves with special township licenses in addition to the regular hunting license.

No open season for pheasants was provided in the townships of Bayham, Dorchester South, Dunwich, Malahide, Marysburgh South, Metcalfe, Middleton, Oneida and Westminster. This was in compliance with the request from the respective Controlling Organization in these townships.

(c) Essex (excluding Pelee Island) and Kent counties, between the hours of 8:00 a.m. and 5:30 p.m. October 28th, 29th and 30th, 1943; and Lambton County, (other than Plympton Township), between the hours of 8:00 a.m. and 5:30 p.m. October 30th, 1943. Bag limit was three (3) cock birds per day.

QUAIL:—There was very little change in conditions respecting this species of game bird. Their numbers are not plentiful anywhere in the Province and they are to be found in but few sections, principally the far south-western counties, though reports were received of the existence of scattered small bevvies in a few of the eastern counties along the St. Lawrence River.

Hunting of this species was provided only in the Counties of Essex and Kent on the same dates as those on which the hunting of pheasants was permitted, and the bag limit was four (4) birds per day.

DUCKS:—The various species of this division of migratory waterfowl which cross Ontario, particularly during the period of the southerly migration in the fall of the year, continue to be quite plentiful, and reports would tend to indicate that the hunting of wild ducks was greatly enjoyed by a goodly proportion of those who participate in the hunting privileges which are available in Ontario. As has been stated in previous Annual Reports the Regulations which govern the protection of wild ducks and under which hunting provisions are declared are established in accordance with the Migratory Birds Convention Act.

In 1943 the open season extended from September 15th to November 30th in the northern division, and from September 25th to December 10th in the southern division. The bag limit was twelve (12) ducks per day and not more than one hundred and fifty (150) during the period of the open season.

GEESE:—There are but few sections in which favourable wild goose shooting is available in Ontario and these are contained in the territory adjoining the south-western shore of James Bay and in a few counties in the extreme southwesterly portion of the Province. They are observed during the period of migration in other scattered areas, but in these instances conditions are such that favourable shooting is not available.

The same period of open season prevails as in the case of wild ducks with the exception that in the counties of Essex, Kent and Elgin the open season for geese extends from November 1st to January 2nd. The bag limit is five (5) geese per day and not more than fifty (50) during the period of the open season.

WOODCOCK:—While conditions as they apply to this species have shown some improvement in a few sections of the Province, it cannot be said that they are in any way plentiful. Successful hunting of woodcock has been available only in certain southwestern, central and southeastern counties.

The open season in 1943 from October 1st to 31st was applicable throughout the Province, and the bag limits were eight (8) per day and not more than one hundred (100) during the season.

SNIFE:—Conditions with reference to snipe vary in different sections, and while there are some sections in which they may be successfully hunted, as a general rule they are not too plentiful.

The open season in the northern division extends from September 15th to November 15th, and from October 1st, to November 30th in the southern division. Bag limits were twenty (20) per day and two hundred (200) for the season.

PLOVER:—These birds are provided the protection of an entire close season under the Migratory Birds Convention Act. There are no reports from any section of the Province that they are plentiful though improvement has been noted in some areas. The present restrictions are necessary for the preservation of this species.

FUR-BEARING ANIMALS

The following is a summary of conditions which apply to fur-bearing animals throughout the Province, the information having been secured from reports from the field officers:—

BEAVER:—Reports indicate that this splendid fur-bearer continues to thrive in areas which are suitable to its propagation, and to a large extent this desirable condition is attributable to the rigid control which has been provided in recent years for its protection and the restrictions which have been made applicable during the limited periods of open season which have been provided. There are of course certain sections of the Province in which the necessity for an entire close season throughout the year still prevails if conditions are to improve and there are sections in the southern portion of the Province from which it has severed its connection probably for ever.

Favorable reports regarding the conditions which apply to beaver have been received from a majority of the northern Ontario districts and from the more northerly portions of Southern Ontario, and in view of these reports provision was again made for an open season on Beaver, in accordance with the following particulars:

(a) Throughout Northern Ontario (except in that part of the District of Kenora which lies south of the main line of the Canadian National Railway), and in Parry Sound, Muskoka, Nipissing (south), Victoria, Haliburton, Peterborough, Hastings, Lennox and Addington, Frontenac, Renfrew and Lanark, from December 1st to 21st, 1943. It was provided that no trapper could take more than ten (10) beaver during this open season.

(b) In the county of Grey and in the township of Orillia (Simcoe), from November 10th to 30th, 1943. Restricted to residents of the respective areas, with the provision that no trapper should take more than ten (10) Beaver during the season. It was further provided in this case that pelts so taken were to be forwarded to the Department by the respective trappers for disposal on their behalf.

According to records which have been assembled in the Department there were 32,266 beaver taken during these periods of open season and it has been estimated that they had a value of \$1,222,558.74 to the trappers concerned. As compared with the figures for the preceding year there was an increase of 33% in the catch and, by reason of an increase in market prices, the valuation increased 57 per cent.

FISHER:—There are only a few sections of the Province in which these animals are to be found and they are extremely scarce throughout. Very few are taken, and reports would indicate there was no improvement in conditions or increase in their numbers during the period reviewed in this report.

FOX:—These animals were reported to be quite plentiful in most areas throughout the Province, and were quite evidently increasing. There were many complaints received in the Department to the effect that foxes were responsible for much serious damage to flocks of domestic poultry. This condition also resulted in considerable losses among the more desirable game birds. Many township municipal councils continued to pay a bounty on foxes killed within their respective boundaries, and conditions were so serious that it was found necessary to provide a regulation to temporarily rescind the enforcement of legislation which had existed for the protection of this species, and the taking of foxes at all periods of the year and the use of dogs for the hunting of foxes was allowed without the usual permit in the Counties of Brant, Durham, Elgin, Essex, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Northumberland, Oxford, Peel, Perth, Prince Edward, Waterloo, Welland, Wellington, Wentworth and York. There were 53,205 red foxes destroyed during the period covered by this report, respective increases of 22,000 over the previous year and more than 38,000 when compared with the figures for the fiscal period which ended March 31st, 1941.

LYNX:—These animals are extremely scarce throughout Ontario, and in the southern portion of the Province they are practically extinct. There is no indication from any section that their numbers are increasing, and but few are taken by trappers.

MARTEN:—As in the case of Fisher and Lynx, this species has become extremely scarce. There are but few evidences of their existence south of the French and Mattawa Rivers, and there is no noticeable increase in any part of Northern Ontario in which they are reported to exist. The number taken in trapping operations is very limited.

MINK:—This is one of the more prevalent species of desirable fur-bearing animal from the standpoint of the trapper. Conditions continued to be quite favorable during the period under review though there was not much in the way of change reported from any particular section. According to statistics assembled by the Department it would appear that payments received by trappers generally from the sale of Mink pelts are exceeded only by returns from the sale of muskrat and beaver pelts.

MUSKRAT:—This species is found in varying numbers practically throughout Ontario, and, while but little improvement has been reported, from the trapping of these animals during the open seasons was derived a very substantial percentage of the trappers' revenue. The open season is provided by regulation, and the periods which prevail in various divisions are established to coincide with the prevalence of suitable weather conditions in these respective divisions. It has been estimated that the value of the muskrat pelts which were taken during the open season which prevailed during the fiscal year 1943-44 was in excess of \$2,150,000.00 or more than 37% of the value of all the furs taken in trapping operations and marketed during year.

OTTER:—Conditions as they apply to this species cannot be described as better than fair, and there was no improvement reported. They are extremely scarce throughout the southern portion of the Province, and while they are somewhat

more plentiful than this in the north they are not sufficiently numerous to justify any claim that they are an important part of the trapping industry. The numbers which are taken vary but little in any particular open season, though the total catch in 1943-44 was somewhat in excess of the number taken in 1942-43.

RACCOON:—It is only in that part of the Province south of the French and Mattawa Rivers that these animals are to be found. Weather conditions in the north are too severe to encourage the hope that this species could survive to any great extent north of this area. Favourable reports regarding the prevalence of these animals were received from many southern Ontario sections. The open season produced 20,664 pelts, 50 % in excess of the previous year's catch.

SKUNK:—This species continues to be plentiful throughout every section of Ontario. An average catch was the result of operations during the trapping season. The trapping of skunk is altogether too obnoxious and pelt values are not sufficient to warrant any intensive effort along these lines by licensed trappers.

WEASEL:—Conditions with respect to weasel are variable, and though they are plentiful in many sections the pelts are not sufficiently valuable to generally encourage any extensive trapping operations for the taking of this species. The catch in 1943-44 showed an increase over the previous year, and it was a good deal better than an average catch.

The following is a comparative table showing the numbers of pelts of the several varieties of fur-bearing animals taken by licensed trappers, and which were either exported or dressed, during the 1943-44 fiscal period, as well as similar figures for the three preceding years:—

	1940-41	1941-42	1942-43	1943-44
Bear	274	384	288	269
Beaver	21,605	25,197	24,194	32,266
Fisher	858	884	691	1,035
Fox (Cross)	722	1,780	2,649	4,350
Fox (Red)	15,059	32,215	31,297	53,205
Fox (Silver or Black)	67	206	265	499
Fox (White)	91	114	185	33
Lynx	383	537	552	646
Marten	1,439	1,652	1,417	1,610
Mink	38,976	63,996	60,331	52,289
Muskrat	739,224	722,387	642,810	683,450
Otter	3,931	3,880	3,557	3,964
Raccoon	11,973	13,499	13,420	20,664
Skunk	72,005	94,656	48,337	79,298
Weasel	53,719	80,776	62,553	67,461
Wolverine	2	3	6	5

Trappers experienced a very successful season both from the standpoint of an increased number of pelts which were taken and regarding the financial returns which were derived by them from the sale of such pelts. The demand for furs resulted in a considerable increase in market values for practically all species and from information compiled in the Department it has been estimated that trappers who were responsible for taking these pelts received a total of \$5,774,014.16 from the sale thereof. Due to the very favourable conditions which prevailed and to which previous reference has just been made this amount is \$2,228,076.64 in excess of the proceeds derived from such sales in the preceding season.

In addition Departmental records show that during this fiscal year licensed fur farmers marketed the pelts of 22,862 silver or black foxes, 1,243 blue foxes,

132 cross foxes and 58,110 Mink, all of which had an estimated value of \$1,859,-917.63, and which was \$370,416.18 in excess of such returns in 1942-43.

It will be seen that the fur produced by trappers and by licensed fur farmers during the 1943-44 season was marketed for the total sum of \$7,633,931.79.

FUR FARMING

Although market prices for raw furs improved substantially, the high cost of feed and the scarcity of help caused some further recession in the fur-farming industry. During the year 1943 there were, 1,222 fur farmer's licenses issued, 1,119 being renewals of previous licenses and 103 for new fur farms. This represents a decrease of 17 per cent.

As is indicated in the following table mink and foxes are the principal species propagated on these fur farming premises. Experiments carried out by fur farmers in the raising of fisher, marten, muskrat and beaver were negligible.

BREEDING STOCK ON LICENSED FUR FARMS AS AT JANUARY 1st

	1941	1942	1943	1944
Beaver	13	18	21	23
Fisher	26	16	15	12
Cross Fox	134	112	68	58
Red Fox	65	73	96	123
Silver Black Fox	16,034	15,630	12,901	12,114
Blue Fox	397	644	595	838
Platinum Fox	X	X	125	729
White marked Fox	X	X	1,379	2,030
Lynx	2	2	2	0
Marten	16	19	15	20
Mink	34,277	38,650	29,345	33,971
Muskrat	179	119	52	0
Otter	2	0	0	0
Raccoon	139	124	121	155
Skunk	7	5	2	0

X New type foxes previously included with Silver Black Foxes.

The subjoined table shows an analysis of the location of licensed fur farm premises:—

County or District.	Farms	County or District.	Farms	County or District.	Farms
Algoma	17	Huron	57	Perth	44
Brant	10	Kenora	18	Peterboro	3
Bruce	51	Kent	20	Prescott	4
Carleton	27	Lambton	14	Prince Edward	5
Cochrane	5	Lanark	79	Rainy River	23
Dufferin	4	Leeds	17	Renfrew	64
Dundas	5	Lennox & Addington	1	Russell	7
Durham	5	Lincoln	5	Simcoe	78
Elgin	9	Manitoulin	17	Stormont	7
Essex	11	Muskoka	7	Sudbury	6
Frontenac	25	Middlesex	45	Temiskaming	8
Glengarry	3	Nipissing	5	Thunder Bay	60
Grenville	9	Northumberland	3	Victoria	15
Grey	78	Ontario	23	Waterloo	46
Haldimand	19	Oxford	26	Welland	7
Haliburton	1	Norfolk	10	Wellington	21
Halton	24	Parry Sound	11	Wentworth	24
Hastings	9	Peel	16	York	114

CROWN GAME PRESERVES

The only extension in the policy of creating and maintaining Crown Game Preserves throughout the Province was the addition of a further Beaver Sanctuary, in the District of Patricia. The area involved was contained within the following boundaries, viz:—on the east the west shore of James Bay north from the mouth of the Kapiskau River to a point in latitude 54 degrees and 30 minutes north, on the north the parallel of latitude 54 degrees and 30 minutes north west from the shore of James Bay to longitude 85 degrees, on the west the 85th meridian south from latitude 54 degrees and 30 minutes north to the south bank of the Kapiskau River, and on the south the south bank of the Kapiskau River from the 85th Meridian to the west shore of James Bay.

This area was designated as the "Attawapiskat Beaver Sanctuary" and the regulation which governs was provided at the suggestion of the Hudson's Bay Company. This regulation for the protection of beaver will be effective for a period of five years, with a provision for extension of such protection provided the terms can be reasonably observed. Trapping of fur-bearing animals other than beaver is restricted to Indians resident in Ontario, and the introduction of beaver for purposes of re-stocking the area is to be undertaken by the Hudson's Bay Company.

This is the fourth such Beaver Sanctuary which has been created in the far northern portion of the Province.

The only other regulation with reference to Crown Game Preserves which was adopted during the year provided for a change in the boundaries of the Markham Crown Game Preserve, located in the Township of Markham (York County), and which was originally established by Regulation dated April 22nd, 1936.

WOLF BOUNTIES

The following is a comparative statement showing annual wolf bounty statistics for a period of five years ending with the fiscal year 1943-44:—

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1940	1,107	614	22	1,743	\$25,058.12
For year ending Mar. 31, 1941	738	400	8	1,146	16,477.43
For year ending Mar. 31, 1942	1,199	577	37	1,813	40,593.77
For year ending Mar. 31, 1943	935	497	32	1,464	33,606.62
For year ending Mar. 31, 1944	1,302	731	32	2,065	46,545.75

The rate of bounty which was paid during the 1943-44 period was \$25.00, and on pups, animals under the age of three months, \$5.00.

The very noticeable increase in the number of wolves which was killed during the year was perhaps largely due to the more favourable weather conditions which prevailed during the winter.

Claims for the payment of wolf bounty numbering 1,511 and covering a total of 2,126 wolves were submitted to the Department. Of these claims twenty-nine (29) affecting forty-nine (49) animals were disallowed for various reasons principal among which were that the pelts submitted on examination proved not to be wolves and also that insufficient evidence was produced. At the end of the fiscal period seven applications in respect to twelve (12) additional wolves were in abeyance, and as indicated in the preceding statistical table bounty was paid during the year on a total of 2,065 wolves.

The following is a summary showing in detail the sources of origin and the varieties of wolves on which applications for bounty were submitted:—

SUMMARY OF APPLICATIONS FOR PAYMENT OF WOLF BOUNTIES

County	Timber	Brush	Pups	Total
Bruce	14	13		27
Carleton	2	1		3
Durham	0	1		1
Frontenac	15	19	7	41
Glengarry	0	1		1
Grey	0	2		2
Haldimand	0	1		1
Halton	0	1		1
Hastings	26	4		30
Huron	0	1		1
Kent	0	3		3
Lambton	0	7		7
Lanark	9	0		9
Leeds	0	1		1
Lennox & Addington	12	2		14
Lincoln	0	1		1
Ontario	7	14		21
Norfolk	0	9		9
Northumberland	1	0		1
Peel	0	1		1
Peterborough	18	0		18
Prince Edward	0	5		5
Renfrew	53	5		58
Simcoe	14	9	6	29
Victoria	9	26		35
Welland	0	2		2
York	0	14		14
Total Counties	180	143	13	336
DISTRICTS				
Algoma	99	64	8	171
Cochrane	31	1		32
Haliburton	18			18
Kenora	263	112		375
Manitoulin	34	126	9	169
Muskoka	42	8		50
Nipissing	121	27		148
Parry Sound	69	9		78
Patricia	81	20		101
Rainy River	131	92	7	230
Sudbury	126	78	9	213
Temiskaming	17	1		18
Thunder Bay	120	67		187
Total Districts	1,152	605	33	1,790
Grand Total	1,332	748	46	2,126

Following the practice which was instituted on November 1st, 1942, such wolf pelts as were submitted to the Department in support of applications for the

payment of bounty were, following approval of the respective applications delivered to the Seamen's Fur Vest War Project for manufacture into garments for the use of members of the Naval Service and Merchant Marine, a branch of voluntary war service which was highly appreciated by those to whom such garments were made available.

From Departmental records it has been ascertained that farmers were responsible for applications in respect to 704 of these wolves; Indians and trappers in respect to 916; hunters, guides and rangers in respect to 225; and the remainder are assigned to others in miscellaneous occupations.

Forty-five per cent were taken in snares, twenty-five per cent in traps, twenty-four per cent were shot, three per cent poisoned. The remainder were killed as a result of accidents.

BEAR BOUNTY

The regulation which was originally provided in 1942 and which established conditions to govern the payment of a bounty on bears killed in certain sections was re-affirmed.

The conditions provided for the payment of a bounty of \$10.00 on any bear killed between April 15th and November 30th in Townships devoted to agriculture in certain Counties and Districts.

Some 313 applications for the payment of this bounty, involving 377 bears, were received for consideration. The bounty was paid on 363 bears, and 11 applications in respect to 14 bears were not approved.

It has been ascertained from records on file in the Department that 286 of these bear were shot, 28 were trapped and 6 snared.

The following table indicates the total number of bears killed in each of the Counties and Districts, and in respect of which applications for the payment of bounty were submitted:

County or District	Total
Algoma	18
Cochrane	68
Kenora	5
Manitoulin	5
Muskoka	5
Nipissing	27
Parry Sound	25
Rainy River	33
Sudbury	39
Thunder Bay	27
Temiskaming	50
Haliburton	10
Bruce	7
Frontenac	2
Hastings	20
Lennox & Addington	4
Peterborough	5
Renfrew	27
Total	377

TOURIST OUTFITTERS

A continuation of war-time problems caused some further recession in the tourist industry but there was evidence of increased post-war planning. Thirty-eight (38) applications for permits to establish additional camps were received in the Department, of which fourteen (14) were granted, thirteen (13) were definitely refused, five (5) were tentatively refused for reconsideration after the war and six (6) are still in abeyance pending final decision.

With respect to the 615 licensed camps which were operated in 1942 only 519 licenses were renewed for operations in 1943. However 20 new or re-established tourist outfitters' camps were licensed to operate during the year which reduced the consequent decrease. A total of 539 such camps were licensed to operate in 1943, and these camps are located in Districts set forth in the following schedule:—

Algoma	76
Cochrane	7
Kenora	127
Manitoulin	42
Nipissing	75
Parry Sound	91
Patricia	1
Rainy River	30
Renfrew	12
Sudbury	51
Temiskaming	6
Thunder Bay	21
Total	539

GAME AND FISHERIES ACT

There were no amendments provided with respect to the Game and Fisheries Act which became effective during the year ending March 31st, 1944.

The only regulations which were provided and which are additional to the ones to which other references are contained in this report were,—

- (a) Providing an open season for the taking of black and grey squirrels, south of the French and Mattawa Rivers and Lake Nipissing, November 4th, 5th and 6th, 1943, with a bag limit of five (5) per day; and
- (b) Prohibiting the taking of minnows in excess of a total weight of forty (40) pounds from the waters of Lakes Simcoe and Couchiching during the period between October 1st, 1943 and March 31st, 1944.

ENFORCEMENT

Provisions of the Game and Fisheries Act and the Regulations which are established thereunder, as well as the Migratory Birds Convention Act and the Special Fishery Regulations for the Province of Ontario are administered within the jurisdiction of this Department, and for the enforcement of this Legislation and the various Regulations the Department maintains a regular staff of field service officers designated as Game and Fisheries Overseers. The services of these regular overseers are augmented by the appointment of additional seasonal overseers whose services are retained periodically for short periods, more particularly during the spring fish spawning periods and in areas in which these extra men are required. Members of the Ontario Provincial Police Force also cooperate with our officers to the end that better observance of these provisions may be secured.

In this connection it would be difficult to estimate the actual value to the Province as a whole of the voluntary efforts provided by the many hundreds of Deputy Game Wardens who are appointed annually, with authority to see that those with whom they might come in contact observe and obey these various provisions, and the services along educational and conservational lines which are available through the hundreds of local Game and Fish Protective Associations which have been organized and flourish throughout the Province. This co-operation in past years by sportsmen and organizations interested in promulgating in all concerned the desirability of maintaining undiminished as far as possible our wild life natural resources is an asset which cannot be computed in terms of monetary references and one which has been deeply appreciated by those to whom the administration of the Department of Game and Fisheries has been assigned. This co-operation in the work of enforcement and conservation has undoubtedly influenced a spirit of better law observance by those who hunt, fish and trap in this Province than could have been secured under conditions where such co-operation had not been available.

Enforcement officers in the performance of their duties did interrupt offenders on various occasions and in such cases the seizure of equipment being used in violation of provisions of the Act and regulations subsequently followed. During the year under review there were 1,201 cases in which such seizures were provided. Such seizures were the result of action provided by Game and Fisheries Overseers in 1080 cases, by Deputy Game Wardens in 24 cases, by Provincial Police Constables in 25 cases. In 66 cases the seizures were the result of co-operative action by Overseers, Deputy Game Wardens and Provincial Police, and in 6 cases by members of Municipal police forces, and in two of which they were assisted by Game and Fisheries Overseers.

The following is a summary of the articles which were seized in these actions:—

Live animals and birds	in 10 cases
Birds, game animals and meat	in 147 cases
Fire-arms and ammunition	in 398 cases
Fish	in 173 cases
Nets and fishing equipment	in 130 cases
Angling equipment	in 109 cases
Pelts and hides	in 247 cases
Traps and trapping equipment	in 188 cases
Canoes, rowboats and motor-boats	in 19 cases
Outboard motors	in 3 cases
Motor vehicles	in 8 cases
Poison	in 4 cases
Flashlights and Lanterns	in 43 cases
Spears	in 48 cases
Miscellaneous articles	in 51 cases

A combination of articles seized in individual cases,—such as fire-arms and game, pelts and traps, fishing tackle and fish, etc., is responsible for the difference in the total of the above summary and the number of the actual cases in which seizure of articles was reported.

From the records is derived the following information with reference to the number and types of fire-arms which were seized, viz:—Shot-guns, single barrel and double barrel, 124; repeating shotguns, 24; automatic shotguns, 1; 410 gauge shotguns, 7; rifles, .22 calibre, 144; high-powered rifles, including .30, .300, .30/06, .303, .30/30, .32, .32/20, .32/40, .351, .38, .38/55, .40, .44, .44/40, 6.5MM,

7MM, and 57 calibres, 82; rifles of .25, .25/.20, and .25/.30 calibre, 4; revolvers 5; and air-guns, 18.

Details of confiscated pelts of fur-bearing animals are as follows:—

Beaver	304
Fisher	7
Fox	61
Marten	12
Mink	49
Muskrat	389
Otter	8
Raccoon	107
Skunk	2
Squirrel	124
Weasel	54
Wolf	5
Deer and moose hides	30

Included among the miscellaneous articles which were seized were 14 axes and hatchets, 2 hammers, 13 pack sacks and dunnage bags, 4 haversacks, 8 shovels, 8 duck decoys, 5 car batteries (used for the operation of artificial lights), 3 tents, 3 camp stoves, 3 fish containers and 7 ice chisels.

Charges were laid and prosecutions followed in 1012 cases in which violations of the Game and Fisheries Act and the various Regulations were involved. As a result of these charges 963 convictions were registered and varying penalties imposed. In 43 cases the charges were dismissed and in 6 cases the charges were withdrawn.

In connection with the convictions the charges were laid by Game and Fisheries Overseers in 922 cases, by Provincial Police in 32 cases, by joint action on the part of Overseers and Police in 8 cases, and by Municipal Police Officers in 1 case.

The charges were laid by Game and Fisheries Overseers in 42 cases and by Provincial Police Constables in 1 case in those instances in which such charges were dismissed at the hearing by Magistrates.

In the actions in which the charges were withdrawn the informations had been laid by Overseers in 5 cases and by joint action between Overseers and Provincial Constables in 1 case.

FISH CULTURE BRANCH

During the year, twenty-seven hatcheries and rearing stations were operated successfully. No new plants were established, in keeping with the restrictions imposed by wartime conditions.

For the culture of game-fish the development of rearing stations or a combination of hatchery and rearing station instead of a hatchery only, is in keeping with progressive developments in this field. A hatchery may be defined as a building in which is housed all the necessary equipment for hatching and rearing of fish to the fry or advanced fingerling stages. A rearing station is an extension of this arrangement; large tanks, raceways or ponds being provided for accomodating fish from the underyearling to yearling or older stages.

Of the twenty-seven stations, eleven are provided with hatcheries only, four with ponds only, one with raceways only, three with a combination of hatchery and ponds, eight with a combination of hatchery, raceways and ponds.

Speckled trout are cultured at fourteen stations, rainbow trout at two, brown trout at six, Kamloops trout at two, lake trout at nine, small-mouthed black bass at seven, large-mouthed black bass at one, maskinonge at one, perch at one, blue pickerel at one, yellow pickerel at ten, white-fish at ten, herring at three and minnows at four.

There are facilities at three stations for retaining a selected stock of adult speckled trout for breeding purposes. A breeding stock of brown, rainbow and Kamloops trout are provided for at one station.

Practically all the speckled trout, brown trout and Kamloops trout distributed to suitable and publicly fished waters are either yearlings or older fish.

Black bass, maskinonge, rainbow trout and lake trout, are, generally speaking, distributed in the fry or fingerling stages. Culture of lake trout to the yearling stage has been developed, successfully, at certain stations, and when additional pond space is available, expansion of the culture of lake trout in this direction may be undertaken.

White fish, herring, perch, blue pickerel and yellow pickerel are distributed in the fry stage.

THE CULTURE AND DISTRIBUTION OF FISH

Speckled Trout:

Approximately 3,084,000 speckled trout yearlings and 10,300 adults were planted in suitable waters during the year. The distribution of yearlings was approximately 6 per cent greater than that of the preceding year.

Brown Trout:

The Department has been careful to avoid planting brown trout in streams which still continue to support native speckled trout satisfactorily. Distribution of browns is confined to those portions of streams of southern Ontario where there is little if any likelihood of re-establishing native trout on a practical basis and where speckled trout fishing is unimportant with the possible exception that in some cases small feeder creeks may still continue to support a limited number of speckled trout.

Some good results have followed the introduction of browns, but it is necessary to obtain more information on the success of many individual plantings before definite conclusions may be drawn.

A total of 314,000 browns were planted, of which yearlings numbered approximately 96 per cent.

Rainbow Trout:

(a) Steelhead Trout:

The distribution of rainbow trout fingerlings was 34% lower and yearlings 20% greater than that of the preceding year.

(b) Kamloops Trout:

The culture of this variety of rainbow trout was disappointing. The egg collection from the breeding fish in the Normandale ponds has decreased. Whether conditions of the environment, or methods of spawning are responsible for evident sterility is problematical. A small supply of eggs was obtained from Kamloops B.C., and the product of these is being cultured at Chatsworth Trout Rearing Station to determine whether water supply and other conditions are controlling factors in successful culture.

The Kamloops trout is a magnificent game fish and the habitat conditions

required by speckled trout are reported to be somewhat similar for Kamloops trout. Some good reports of successful planting have been received, and when the necessary personnel is available a closer check on the distribution already made will be advantageous.

Lake Trout:

The collection of lake trout spawn in the fall of 1942 was 50% lower than that of the preceding year, resulting in a decrease in the distribution of fingerlings in approximately the same proportion. Prevailing stormy weather prevented our spawning crews from carrying out effective operations.

When the take of fish is reduced the spawn collection is reduced in about the same proportion. Thus, the distribution of fry and fingerlings is adversely affected.

Fair weather, prevailed during the lake trout spawning season of 1943, but the take of fish with certain exceptions, showed evident signs of decline; the effects of this reduced take were reflected in the total collection of spawn, and thus in the total distribution of fry and fingerlings. If the take of lake trout in the Great Lakes continues to decrease, a protective closed season may be necessary.

The progress made in the culture and distribution of yearling lake trout was promising:

1942	—	10,700	yearlings
1943	—	60,900	yearlings

Whitefish:

The decrease in the collection of whitefish eggs in 1942 was approximately 28,000,000. This decrease was not serious or confined to one spawning area; some areas showed slight or substantial increases. The weather during the spawning period was not good for operations of this nature.

Access to whitefish spawning grounds in the eastern end of lake Erie has been greatly curtailed for reasons beyond control during wartime.

The total number of whitefish planted in 1943 was 6% less than that of the preceding year.

Herring:

The collections of herring spawn were carried out on the Bay of Quinte, Lake Ontario, and the west end of Lake Erie. Only a very limited amount was taken at the latter point. As a result of these collections the distribution of herring fry showed a favourable increase of approximately 33 per cent in excess of that of the preceding year.

Yellow Pickerel:

There was a 12.6 per cent decrease in the distribution of yellow pickerel as compared with that of 1942.

The chief spawntaking areas where decreases occurred were, Hay Bay, (Lennox-Addington), Echo Lake (Algoma) and Whitefish Falls, (Bay of Islands, North Channel). At the other spawntaking areas increases or a very slight change in yield was evident.

In the Hay Bay area the ice was slow in going out; the fish swam under the ice into the Bay, and spawned before the nets were set. This happens during a prevailing west wind; with an east wind the condition is reversed, and there is no difficulty in getting the equipment in place before the spawning run. In Echo Lake many pickerel moved up under the ice before the nets could be set; this caused a reduced collection of spawn. In 1941 and 1942 pickerel spawn was collected suc-

cessfully, in Callander Bay, Lake Nipissing for the Little Current Hatchery, but in 1943, operations were discontinued there, and centred at Whitefish Falls, Bay of Islands, North Channel, where the take of spawning pickerel was limited. This accounted to some extent at least for the reduced plant of pickerel in 1943.

Small-mouthed Black Bass:

The number of bass fry planted was substantially the same as in the preceding year, but the number of fingerlings was considerably reduced.

Large-mouthed Black Bass:

The number of large-mouthed black bass propagated and distributed was greatly in excess of that of the preceding year. The percentage increase in the distribution of fry was 174 per cent and of fingerlings 102 per cent.

Perch:

The take of perch spawn in Lake Erie off Kingsville, is subject to wide variation. Only 19,000,000 fry were distributed in 1943, whereas in 1939 three to four times that number were distributed.

Maskinonge:

The distribution of maskinonge fingerlings was 205 per cent higher than that of the preceding year, whereas the distribution of fry was 26 per cent lower.

CLOSED WATERS

The closure of selected natural water areas to all fishing during alternate years, for an extended period of time, or permanently, is one of the practical methods for conserving the breeding stock. The fish thrive in suitable areas under suitable conditions without interference and spread to other parts of the same lake. There is thus set up in each body of water a permanent breeding stock, and there is being taken from it, only the natural increase each year.

Ten out of fourteen of the following waters were closed on the basis of biological survey, and the remainder were reported upon favourably by the Department's field officers.

When personnel is available, more intensive follow-up studies will be made concerning the effectiveness of closure in maintaining the fisheries on a proper basis.

In addition to the waters already closed for the natural protection and propagation of fish, the following were closed during the year, April 1, 1943 to March 31, 1944:

BLACK DUCK LAKE (Deer Bay)

Township of Harvey, County of Peterborough.

CHEMONG LAKE (Portion located as follows):

Lots 1, 2 and 3, Concession IV, Township of Smith, County of Peterborough.

Lot 23, Concession IV, Township of Emily, County of Victoria.

Lots 22 and 23, Concession V, Township of Emily, County of Victoria.

CLEAR LAKE (Gravel Lake)

Township of O'Brien, District of Cochrane.

DEEP BAY (Sparrow Lake)

Township of Matchedash, County of Simcoe.

DRYDEN CREEK

Townships of Dryden and Cleland, District of Sudbury.

GEORGIAN BAY (Portion located as follows):

- (a) An area approximately 1 mile square lying west of Electric Island;
- (b) An area approximately 1 mile square lying west of Lot 51, Concession VIII, township of Harrison, District of Parry Sound;
- (c) An area lying east of and extending approximately 2 miles along the shore line opposite concessions XIII and XIV, Township of Harrison, District of Parry Sound.

GOOSE LAKE

Townships of Fenelon and Somerville, County of Victoria.

GOOSE LAKE (Scugog River)

Township of Fenelon, County of Victoria.

LITTLE MUD LAKE (Ohemong Lake)

Township of Smith, County of Peterborough.

MOOSE LAKE

Unorganized territory west of the Township of Smellie, District of Kenora.

OPINICON LAKE (part)

Lot 16, Concession 6, and lots 15 and 16, Concession 7, Township of Crosby S, County of Leeds.

SEARIGHT'S BAY (North River)

Township of Belmont, County of Peterborough.

TAYLOR'S BAY and MUNN'S BAY (Belmont Lake)

Township of Belmont, County of Peterborough.

WHITE PINE LAKE

Township of Gamble, District of Timiskaming.

BIOLOGICAL SURVEYS

Biological studies during the year were confined almost entirely to fish culture in the various hatcheries and rearing stations throughout the province.

The Ontario Fisheries Research Laboratory of the Department of Biology, University of Toronto, continued the studies of the fish resources of Algonquin Park restricting the work of the most essential features in compliance with the requirements imposed by wartime conditions.

The Laboratory has continued to receive financial assistance from the Ontario Department of Game and Fisheries, the National Committee on Fish Culture and the University of Toronto.

The Ontario Department of Game and Fisheries have co-operated in the stocking programme, by making available whatever stocks of speckled trout and lake trout were required from time to time.

"In the first years of the study of Park lakes it was learned that some of the lakes gave much better returns than others to the anglers and a definite programme for maintaining and improving the fishing was undertaken. These measures of conservation consisted in stocking certain lakes and streams with speckled trout fry and fingerlings, transferring lake trout from in-Park lakes to those more heavily fished, closing certain lakes in alternate years, and introducing food fish such as perch and lake herring for bass and trout into those lakes where it was found that the food supply was sparse.

CREEL CENSUS

It is necessary to obtain some measure of the fish production from the various lakes from year to year in order to evaluate the various conservation measures being applied. The best method of obtaining this measure of the fishing for a large number of lakes and streams from year to year is through the creel census carried out by active cooperation of the anglers. The great importance of the Algonquin Park Creel Census lies in its value as being a measure of both the fish available to the anglers and the improvement or decline of fishing in the various lakes and rivers from year to year. For this purpose the Park has been divided into three areas: Algonquin Park South, Algonquin Park North, Opeongo and adjacent lakes. The creel census of Algonquin Park North was carried out in 1943 for the first time.

STOCKING

The creel census has already shown us that stockings of some lakes and rivers with fish has improved the fishing while in other lakes the planting has given little or no return so it is now possible to emphasize the stocking of those waters which promise the most satisfactory returns. In 1943, 11,880 speckled trout were planted in twenty-six lakes in Algonquin Park North and 49,000 speckled trout were planted in thirty-six lakes in Algonquin Park South. The stocking with fish in 1944 will be carried out with emphasis upon those lakes which give the best promise of returns and upon some additional lakes which were studied during 1943, as well as some of the rivers which are being studied for the purpose of carrying out stream improvements to increase the production of trout.

LAKE CLOSURE

It has also been found that alternate annual closure of lakes is having a good effect on increasing both the size and numbers of fish available to anglers in many lakes and this practice is being extended to protect and improve the game fish in the smaller Park Lakes where the creel census indicated a dangerous decrease in the game fish available.

LAKE TROUT STUDIES

The work on the food and growth of lake trout has been continued and it has been found by Dr. Fry that lake trout reach a catchable size at an older age than speckled trout and as a result of this it takes a longer period for them to respond to conservation measures. He found also, that the lake trout in different lakes grow at very different rates but from this information it is possible to prepare a table giving the approximate average relations of age and size of lake trout.

**Approximate Age-Length-Weight Relations of
Lake Trout**

Age Yrs.	Length Inches	Weight Pounds
1.....	4.....	
2.....	7.....	
3.....	9.....	1.0
4.....	12.....	1.2
5.....	14.....	1.3
6.....	16.....	1.5
7.....	18.....	2.4
8.....	20.....	3.0
9.....	22.....	3.5
10.....	23.....	4.2
11.....	24.....	5.0
	26.....	8.0
	28.....	10.0

Work was continued on the study of insect population of streams as fish food and the studies of the temperature and oxygen conditions in lakes as related to the movements of fish. Experiments were continued on the rate of digestion of food by fish to determine the amount of food used by fishes during a year as the basis for measuring the productive capacity of game fish in the various Park lakes."

The work of the laboratory has been reported, annually, in several publications.

ACKNOWLEDGEMENTS

In conclusion I desire to express general satisfaction with the services of respective members of the Departmental staff, both at headquarters and in the field. They were conscientious in the performance of their duties and courteous in their contacts with the general public.

The co-operation of the Ontario Federation of Anglers and Hunters, as well as the local Fish and Game Protective Associations and the Northern Ontario Tourist Trade Association has been provided at all times and has resulted in a better degree of law observance in the interests of protecting the fish and game resources of Ontario and has resulted in easing the burdens of administration.

Assistance has been forthcoming from many other organizations and individuals too numerous to specify in detail, and particularly from Municipal Councils and Controlling Organizations in the Townships incorporated in the scheme of Regulated Game Preserve Areas and which in large measure has been responsible for the success which this scheme has presently attained.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. TAYLOR,

Deputy Minister of Game and Fisheries

APPENDIX No. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1, 1943, to March 31, 1944.

LARGE-MOUTHED BLACK BASS

FRY

Bruce	35,000
Huron	40,000
Muskoka	30,000
Norfolk	2,500
Oxford	20,000
Parry Sound	370,000
Perth	10,000

FINGERLINGS

Lincoln	2,000
Muskoka	12,500
Simcoe	9,000
Victoria	12,000
Welland	2,000
Wellington	1,000

YEARLINGS AND ADULTS

Brant	195
Norfolk	95

SMALL-MOUTHED BLACK BASS

FRY

Bruce	45,000
Elgin	75,000
Grey	5,000
Hastings	6,000
Huron	20,000
Manitoulin	195,000
Muskoka	145,000
Nipissing	120,000
Norfolk	25,000
Parry Sound	510,000
Peterborough	50,000
Prince Edward	6,000
Sudbury	165,000
Waterloo	100,000
Great Lakes	45,000

FINGERLINGS

Algoma	62,250
Brant	1,000
Bruce	950
Carleton	400
Cochrane	1,600
Dundas	1,000
Elgin	2,000
Frontenac	28,500
Haldimand	2,000
Haliburton	12,000
Halton	1,000
Hastings	2,100
Lanark	13,700
Leeds	15,500
Lennox & Addington	9,000
Manitoulin	36,500
Middlesex	2,000
Muskoka	13,000
Nipissing	22,200
Parry Sound	11,500
Peterborough	10,000
Renfrew	5,500

Russell	400
Simcoe	27,000
Sudbury	74,000
Thunder Bay	13,400
Timiskaming	3,200
Victoria	14,500
Welland	2,000
Wellington	3,000
York	1,500

YEARLINGS AND ADULTS

Brant	162
Hastings	85
Manitoulin	380
Norfolk	130
Parry Sound	377
Peterborough	135
Prince Edward	100

MASKINONGE

FRY

Hastings	75,000
Lennox-Addington	15,000
Muskoka	25,000
Northumberland	60,000
Peterborough	645,000
Simcoe	50,000
Victoria	295,000

FINGERLINGS

Hastings	800
Nipissing	300
Peterborough	300
Prince Edward	450
Victoria	300

PERCH

Great Lakes	19,000,000
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PICKEREL

EYED EGGS

Bruce	650,000
Cochrane	3,150,000
Grey	350,000
Muskoka	1,500,000
Nipissing	8,550,000
Parry Sound	4,150,000
Simcoe	2,900,000
Sudbury	1,500,000
Timiskaming	3,500,000
Victoria	700,000

FRY

Algoma	7,850,000
Carleton	2,000,000
Cochrane	1,950,000
Dundas	500,000
Frontenac	7,450,000
Grenville	2,000,000
Haliburton	1,600,000
Hastings	4,700,000
Kenora	74,475,000
Kent	1,000,000
Lanark	7,000,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
 April 1, 1943, to March 31, 1944.

PICKEREL—Continued

Leeds	1,600,000
Lennox-Addington	2,450,000
Manitoulin	3,450,000
Muskoka	3,000,000
Nipissing	1,000,000
Northumberland	2,550,000
Parry Sound	6,900,000
Peterborough	13,150,000
Prince Edward	1,000,000
Rainy River	31,500,000
Renfrew	7,200,000
Russell	500,000
Sudbury	5,750,000
Thunder Bay	500,000
Victoria	2,600,000
Great Lakes	43,250,000

BLUE PICKEREL

Lake Erie	150,000
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BROWN TROUT**EYED EGGS**

Exchange	10,000
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FINGERLINGS

Sale (Propagation purposes)	1,000
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YEARLINGS

Brant	13,600
Bruce	12,800
Durham	13,450
Elgin	29,300
Grey	35,700
Haldimand	1,000
Halton	19,800
Hastings	7,000
Huron	6,600
Lambton	1,000
Lennox-Addington	1,400
Middlesex	6,600
Norfolk	29,500
Northumberland	8,400
Ontario	4,200
Oxford	16,800
Parry Sound	1,200
Peel	13,200
Perth	3,600
Peterborough	12,285
Renfrew	4,200
Simcoe	16,200
Waterloo	10,800
Welland	7,400
Wellington	17,100
Wentworth	5,400
York	3,300
Miscellaneous, Sale (Propagation purposes)	1,500

LAKE TROUT**EYED EGGS**

Exchange	200,000
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FRY

Thunder Bay	25,000
Great Lakes	100,000

FINGERLINGS

Algoma	163,000
Cochrane	21,000
Frontenac	95,000
Haliburton	200,000
Hastings	59,500
Kenora	93,300
Lanark	5,000
Leeds	20,000
Lennox-Addington	30,000
Manitoulin	20,000
Muskoka	370,000
Nipissing	88,000
Parry Sound	215,000
Peterborough	39,000
Rainy River	87,000
Renfrew	77,000
Sudbury	83,000
Timiskaming	61,000
Thunder Bay	90,000
York	30,000
Great Lakes	6,202,000

YEARLINGS

Bruce	2,400
Grey	2,600
Nipissing	44,000
Timiskaming	10,000
York	1,860

RAINBOW TROUT**FINGERLINGS**

Algoma	63,242
Manitoulin	5,000
Sudbury	5,000

YEARLINGS

Dufferin	6,000
Elgin	500
Haliburton	3,600
Simcoe	1,800
Waterloo	1,000
Miscellaneous Sale, (Propagation purposes)	2,550

KAMLOOPS TROUT**YEARLINGS**

Grey	500
Muskoka	3,500
Parry Sound	1,000

SPECKLED TROUT**FRY**

Timiskaming	5,000
-------------------	-------

FINGERLINGS

Muskoka	8,000
Thunder Bay	400
Miscellaneous (Sale, Proagation purposes)	1,000

YEARLINGS

Algoma	449,000
Bruce	43,800
Cochrane	97,300
Dufferin	33,600

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1, 1943, to March 31, 1944.

SPECKLED TROUT—Continued

Durham	21,750
Elgin	8,400
Frontenac	47,200
Grey	91,763
Haliburton	31,100
Halton	1,200
Hastings	116,950
Huron	11,300
Kenora	4,000
Lanark	17,800
Lennox-Addington	36,200
Lincoln	1,800
Manitoulin	128,100
Middlesex	600
Muskoka	168,600
Nipissing	239,440
Norfolk	24,800
Northumberland	42,200
Ontario	2,600
Oxford	1,500
Parry Sound	158,000
Peel	14,300
Perth	600
Peterborough	56,580
Renfrew	99,300
Simcoe	27,500
Sudbury	458,700
Thunder Bay	352,700
Timiskaming	147,800

Victoria	3,100
Waterloo	11,200
Wellington	20,400
York	2,750
Miscellaneous (Sale, Pro- pagation purposes)	13,650

ADULTS

Algoma	8,000
Thunder Bay	1,392
Timiskaming	900

WHITEFISH**EYED EGGS**

Exchange	400,000
Kenora	500,000
Thunder Bay	1,000,000

FRY

Kenora	54,545,000
Manitoulin	2,500,000
Rainy River	26,150,000
Thunder Bay	800,000
Great Lakes	285,782,500

HERRING**FRY**

Great Lakes	
Lake Erie	3,060,000
Lake Ontario	21,500,000

APPENDIX No. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES—1939 TO 1943, INCLUSIVE

	1939	1940	1941	1942	1943
Large-mouthed Black Bass					
Fry		230,000	110,000	185,000	507,500
Fingerlings	1,890	5,500	17,700	19,100	38,500
Yearlings & Adults	497	152	109	290	290
Small-mouthed Black Bass					
Fry	1,386,000	2,512,500	1,911,500	1,535,500	1,512,000
Fingerlings	226,325	449,154	691,925	718,259	392,700
Yearlings & Adults	7,739	1,671	2,254	2,355	1,369
Maskinonge					
Eyed Eggs	120,000				
Fry	2,675,000	2,345,000	2,100,000	1,575,000	1,165,000
Fingerlings	1,300	2,333	1,494	705	2,150
Perch—Fry	72,360,000	13,000,000	31,600,000	24,175,000	19,000,000
Pickarel (Yellow)					
Eyed Eggs	7,000,000	2,000,000	4,500,000	17,250,000	26,950,000
Fry	327,500,000	393,887,000	223,490,000	284,510,000	236,925,000
Adults		100			
Pickarel (Blue)					
Fry					150,000
Brown Trout					
Eyed Eggs					10,000
Fingerlings	29,954	182,725	60,000	23,000	1,000
Yearlings	375,070	252,000	346,188	359,275	303,335
Lake Trout					
Eyed Eggs	1,845,850	575,000	800,000	400,000	200,000
Fry	7,236,900	7,564,000	913,000	367,000	125,000
Fingerlings	9,964,400	7,312,100	18,066,400	15,429,600	8,048,800
Yearlings				10,680	60,860
Atlantic Salmon					
Fry					
Fingerlings		46,385			
Yearlings					
Rainbow Trout					
Fingerlings	109,635	298,420	164,000	111,000	73,242
Yearlings	23,145	19,724	11,750	12,900	15,450
Adults	1,009				
Kamloops Trout					
Fingerlings	105,000		88,150		
Yearlings		26,500	25,000	24,800	5,000
Speckled Trout					
Eyed Eggs				500F	5,000F
Fingerlings	337,000	611,375	394,000	631,775	9,400
Yearlings	2,976,559	3,278,114	3,060,174	2,918,513	3,083,983
Adults	6,315	7,150	16,732	7,527	10,292
Whitefish					
Eyed Eggs				250,000	1,900,000
Fry	326,657,000	403,339,000	375,960,500	394,802,000	369,777,500
Herring					
Eyed Eggs					
Fry	38,550,000	49,050,000	8,630,000	18,430,000	24,560,000
Minnows				500	
Miscellaneous	41				
TOTALS	799,496,629	886,995,903	672,960,876	763,750,279	694,833,371
F—fry					

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters

EQUIP

District	No. of Men	Tugs			Gasoline Launches		Sail and Row Boats		Gill Nets	
		No.	Tons	Value \$	No.	Value \$	No.	Value \$	Yards	Value \$
Northern Inland Waters	722	5	35	15,700	173	90,195	300	16,476	602,830	83,204
Lake Superior	325	11	334	64,800	117	57,485	76	4,700	908,680	120,019
North Channel	102	3	41	20,800	39	20,600	37	1,921	277,120	31,042
Georgian Bay	406	14	331	99,421	123	123,580	109	5,772	1,385,730	170,662
Lake Huron	276	11	239	87,000	91	77,250	24	1,160	1,288,558	171,797
Lake St. Clair	112				51	15,570	70	4,435		
Lake Erie	885	46	750	292,400	179	231,750	123	9,060	2,482,151	340,681
Lake Ontario	573				210	121,180	145	6,102	1,290,350	143,459
Southern Inland Waters	209	2	28	1,900	27	6,256	120	5,388		
Totals	3610	92	1,758	\$582,021	1010	\$743,866	1004	\$55,014	8,235,419	1,060,864

APPENDIX

QUANTITIES OF

District	Herring	Whitefish	Trout	Pike	Pickarel (Blue)	Pickarel (Dore)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	8,949	1,435,207	228,470	888,882	1,533	1,503,187
Lake Superior	1,290,358	336,286	1,323,022	22,402	3,936	187,709
North Channel	45,929	49,087	25,508	82,159	1,140	40,970
Georgian Bay	167,515	441,501	1,066,463	33,905	1,332	68,547
Lake Huron	328,558	113,259	517,399	674	746	167,134
Lake St. Clair				13,838		48,348
Lake Erie	55,684	1,481,372		31,807	9,614,034	453,425
Lake Ontario	857,240	329,319	76,268	64,383	38,228	41,435
Southern Inland Waters				1,812		1,278
Totals	2,754,233	4,186,031	3,237,130	1,139,862	9,660,949	2,512,033
Values	258,673.49	1,136,854.02	853,091.97	84,548.62	1,256,932.60	423,112.45

No. 3

DEPARTMENT, ONTARIO

of Ontario, for the year ending December 31st, 1943

MENT

Seine Nets			Pound Nets		Hoop Nets		Dip and Roll Nets		Night Lines		Spears		Freezers and Ice Houses		Piers and Wharves		Total Value
No.	Yards	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No. Hooks	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	\$
4	440	60	48	\$19,360	73	\$2,420			2,650	276			130	31,760	108	13,135	272,586
			43	16,700									56	26,865	52	12,832	303,401
			35	16,550									24	6,425	19	6,275	103,613
4	550	390	60	65,300	23	345	1	2	12,800	2,575			61	18,260	57	31,876	518,183
			87	59,600					3,300	600			54	21,700	20	5,885	424,992
19	3,800	2,735	137	18,900					4,200	385			16	5,100	12	2,875	50,000
38	10,350	8,700	509	273,700	19	3,064	8	43	2,100	76			112	175,750	92	40,760	1,375,984
8	975	955			585	17,495	9	852	450	15			31	8,425	22	6,400	305,283
36	4,965	6,557			283	8,665	11	41	4,500	185			13	3,440	5	1,000	33,432
109	21,080	19,397	919	470,110	983	31,989	29	938	30,000	4,112			497	297,725	387	121,038	3,387,074

No. 4

FISH TAKEN

Sturgeon	Eels	Perch	Tullibee	Catfish	Carp	Mixed Coarse	Caviare	Total	Value
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	\$ cts.
95,944		8,912	220,643	27,035	264	541,096	880	4,961,002	687,092.04
2,415		1,314	48,171		47	131,626		3,347,286	511,116.89
2,766		22,974	24,837	101	3,030	273,493	27	572,021	59,562.32
487		2,631	68,823	3,009	23,891	131,937		2,010,041	485,283.43
3,067		354,868	246,912	19,252	7,084	77,319	132	1,836,404	361,575.32
9,203		35,195		77,501	76,879	225,436	173	486,573	57,081.92
12,433		711,276		63,225	315,654	1,743,846	477	14,483,233	2,131,838.99
623	34,655	195,908		145,434	201,182	296,354	49	2,281,078	358,009.75
7,998	2,275	13,058		89,572	128,035	373,637	34	617,699	52,094.16
134,936	36,930	1,346,136	609,386	425,129	756,066	3,794,744	1,772	30,595,337	
73,482.22	1,892.00	179,632.68	109,086.92	59,511.99	47,532.24	216,424.98	2,878.64		4,703,654.82

APPENDIX No. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1942 Pounds	1943 Pounds	Increase Pounds	Decrease Pounds
Herring	2,975,406	2,754,233		221,173
Whitefish	5,434,364	4,186,031		1,248,333
Trout	3,845,311	3,237,130		608,181
Pike	1,158,771	1,139,862		18,909
Pickrel (Blue)	4,438,098	9,660,949	5,222,851	
Pickrel (Dore)	2,269,952	2,512,033	242,081	
Sturgeon	88,483	134,936	46,453	
Eels	18,578	36,930	18,352	
Perch	1,565,444	1,346,136		219,308
Tullibee	435,859	609,386	173,527	
Catfish	315,646	425,129	109,483	
Carp	841,594	756,066		85,528
Mixed and Coarse	2,990,624	3,794,744	804,120	
Cavaire	2,637	1,772		865
	26,380,767	30,595,337	6,616,867	2,402,297
Net Increase			4,214,570	

Thirty-Eighth Annual Report

OF THE

**Game and Fisheries
Department**

1944 - 1945

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL No. 9, 1946



ONTARIO

TORONTO

Printed and published by T.E. Bowman, Printer to the King's Most Excellent Majesty
1946

TO THE HONOURABLE ALBERT MATTHEWS,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR YOUR HONOUR:

I have the honour to submit herewith for the information of Your Honour and the Legislative Assembly, the Thirty-Eighth Annual Report of the Game and Fisheries Department of this Province, for the year ending March 31st, 1945.

I have the honour to be,

Your Honour's most obedient servant,

G. H. DUNBAR,
Minister in Charge,
Department of Game and Fisheries.

TORONTO 2,
March 26th, 1946.

THIRTY-EIGHTH ANNUAL REPORT

OF THE

Department of Game and Fisheries of Ontario

TO: THE HONOURABLE G. H. DUNBAR,
Minister in Charge,
Department of Game and Fisheries.

SIR:

I have the honour to submit to you herewith the Thirty-Eighth Annual Report of the Department of Game and Fisheries, in which is contained information with reference to the various Departmental services, as well as condensed statistics and comparative tables for the fiscal year ended March 31st, 1945, and other information which will probably be of interest.

INTRODUCTORY

For several years, in compiling the Annual Report, it has been found necessary to refer to the fact that war and wartime economy are still the most important factors in our national life, and the period under review is no exception; but as the year closes it is quite apparent that the backbone of enemy resistance has been broken, and hopes are high that the end is not far distant, and perhaps in sight.

In reviewing the wild-life situation and administrative activities of the Department during the year, it is desirable and necessary to point out that while there has been but little change in the former, the latter has been carried on under the handicap of prevailing economic conditions. Despite this fact, however, the conservation policies of the Department have been maintained to a very satisfactory degree, and the general situation has not been allowed to deteriorate.

The work of conserving the wild-life natural resources of the Province is complex and perhaps difficult, involving as it does many factors actually not within the scope of Departmental authority, and which have a direct bearing on conditions relative to food, habitat and environment, all of which play a very important part in the continuation and development of the wild-life resources. It is pertinent to add that these governing factors, such as soil, reforestation, water control, and similar problems are receiving a great deal of consideration and attention by various interested public spirited organizations, as well as by the responsible Departments of Government. Every progressive step which is taken to improve deficiencies with a view to restoring the previous natural conditions which existed will be reflected in increased production as well as in the development of wild-life.

The economic and recreational value of wild-life has been emphasized on more than one occasion and in previous reports, but it may be repeated that these values have assumed new and increasing importance during the recent years of conflict. Fishing and hunting have continued to provide clean, wholesome and healthful recreation for an ever growing number of people, included among whom are thousands of war-workers, who because of the strenuous nature of their employment and services require relaxation of the type to be found in the outdoor environment of field and stream, and while the direct contribution made by wild-life to the war effort may not be immediately obvious, it is nevertheless of great significance.

ance. It is not to be assumed that food is the primary objective of those who enjoy fishing and hunting, yet it is a fact that the fish and game taken by the angler and hunter have made a substantial addition to the food supply of the nation as a whole. Huge quantities of game fish were taken by resident and non-resident anglers during the year, while hunters bagged a correspondingly large total of all kinds of game. Every pound of this personally secured fish and meat served to release an equal amount of food for shipment overseas where the demand for such was, and still is, extremely urgent. Commenting on this fact the Director of the U.S. Fish and Wild-life Service, in his annual report to the U.S. Secretary of the Interior states: "Game (in the United States) is estimated to replace annually enough meat to feed an army of 5,000,000 for 77 days." The amount of game and fish taken annually in Ontario would be proportionately large, therefore it provides a considerable saving in the use of our domestic food supply.

Throughout the year the Department has been conscious of the fact that, even during the stress of war, recreation in the outdoors such as wild-life provides is an essential to health and morale, and because of this reason has continued its various activities designed to improve conditions, maintain and develop the resources, and protect them from unnecessary waste or extravagant use. In line with this work, the value and importance of conservation have been continually emphasized, and it is pleasing to report that public co-operation has been very evident. These various activities are set forth in detail herein.

FINANCIAL

The following summary of the revenue collected by the Department of Game and Fisheries during the fiscal year covered by this report indicates in detail the various sources from which such revenue was derived, as well as the amounts collected in each case.

REVENUE FOR THE FISCAL YEAR ENDING MARCH 31st, 1945.

GAME—

Licenses—

Trapping	\$ 53,132.90
Non-resident Hunting	115,590.00
Deer	117,004.70
Moose	4,812.50
Gun	79,389.64
Dog	7,823.65
Fur Dealers	30,652.00
Fur Farmers	6,266.00
Tanners	160.00
Cold Storage	185.00

\$415,016.39

Royalty 194,429.40

\$609,445.79

FISHERIES—

Licenses—

Fishing (Commercial)	\$ 87,253.00
----------------------------	--------------

Angling	412,073.30	
	<u>\$499,326.30</u>	
Royalty	12,565.61	
	<u></u>	\$511,891.91
GENERAL—		
Licenses—		
Tourist Camps	\$ 6,510.00	
Guides	7,432.00	
	<u></u>	\$13,942.00
Fines	24,828.82	
Costs collected (Enforcement of Act)	786.89	
Sales — Confiscated articles, etc.	26,372.27	
Rent	3,335.00	
Commission retained by Prov. on sale of licenses	2,132.72	
Miscellaneous	298.32	
	<u></u>	\$71,696.02
Net Ordinary Revenue		\$1,193,033.72

The total revenue derived from our operations, viz. \$1,193,033.72 is the largest collected in any fiscal year to date, and exceeded by approximately \$10,000.00 the largest previous total, i.e. the sum of \$1,183,269.29 received three years ago, in 1941-42. It was more by \$217,961.12 than the revenue collected in the previous year, 1943-44.

Increased collections were recorded in practically every instance and the only noticeable decrease was in the revenue received from the sale of commercial fishing licenses, which was approximately \$4,000.00 less than the revenue derived from the same source in the previous fiscal year. The most important and greatest increase in revenue, as compared with that of the previous year, was in the fees from the sale of non-resident angling and hunting licenses. The amount received in 1943-44 from the sale of these licenses was \$378,135.00, while the sum of \$527,663.30 was collected in 1944-45, or an increase of \$149,528.30, or approximately seventy per cent. of the total increase.

The revenue as compared with that of the previous fiscal year also shows the following collections and increases, viz.—

The total of \$262,163.39 received from the sale of trapping licenses and the various kinds of resident hunting licenses represents an increase of \$10,419.09.

Fees from the sale of fur dealers' licenses and from fur royalties amounted to \$225,081.40, or an increase of \$49,355.95.

Fines and costs imposed on those convicted of violations of provisions of the Game and Fisheries Act and the regulations amounting to \$25,615.71, represents an increase of \$10,612.61.

The following comparisons in connection with the sale of licenses may prove to be of interest:—

NON-RESIDENT ANGLING LICENSES

	1943-44	1944-45
Individual (Seasonal)	27,314	36,907
Individual (Three-Day)	27,622	32,242
Family	12,593	18,859
Manitoba Residents	699	817
Boys' Camp	13	18

NON-RESIDENT HUNTING LICENSES

	1943-44	1944-45
Small Game	1,605	1,949
Deer	1,782	2,385
General	504	653
Bear (Spring Season)	157	181

RESIDENT HUNTING LICENSES

	1943-44	1944-45
Deer	31,067	31,470
Deer (Camp)	371	398
Deer (Farmers')	6,858	6,786
Moose	854	875
Gun	87,504	92,847

During the year expenditures to a total of \$638,765.27 were made by the Department, and it should be noted that these were all ordinary expenditures. There was no expenditure on capital account. The following statement is a resume of the details of this expenditure:—

EXPENDITURE FOR THE FISCAL YEAR ENDING MARCH 31st, 1945

ORDINARY —

Main Office	\$ 55,819.80
General	45,828.00
Enforcement	238,596.35
Game Animals and Birds	12,095.04
Macdiarmid	3,482.96
Biological and Fish Culture	222,759.54
Grants	5,400.00
Wolf Bounty	45,993.58
Bear Bounty	8,790.00
Total	\$638,765.27

As compared with the previous year this total represents an increase in ordinary expenditure of approximately \$68,000.00, the increase being spread over the various activities indicated in the foregoing table, and \$51,000.00 of this increase was absorbed by the expenditures made in connection with two branches of the Service, viz: Enforcement and Biological and Fish Culture.

The allocation of grants followed the distribution which has been in effect for the past few years, details of which are as follows: \$2,500.00 to the Ontario Fur Breeders' Association, Inc., to encourage the efforts of this Association to improve the practice followed by those engaged in the fur farming industry in the Province; \$500.00 to Professor W. J. K. Harkness in connection with his research

work with a view to providing information which will assist in improving fish culture practice in the Department and throughout Ontario; \$500.00 to the Ontario Federation of Anglers and Hunters for their efforts to secure the co-operation of sportsmen interested in hunting and angling in Departmental activities; and the remaining \$1,900.00 in varying amounts, to the late Mr. Jack Miner, Mr. Thomas N. Jones and Miss Edith L. Marsh in appreciation of their services in providing sanctuary for migratory and native birds on their properties located respectively in the counties of Essex, Elgin and Grey.

The favorable balance of revenue over expenditure for the year under review was \$554,268.45. This balance to the credit of consolidated revenue has been exceeded only once in the history of the Department, viz. in 1941-42, as will be shown in the following table which depicts annual departmental revenues and expenditures during the past ten years:—

	REVENUE	EXPENITURE (Ordinary and Capital)	SURPLUS
1935-36	\$ 683,938.72	\$451,041.91	\$232,896.81
1936-37	782,217.63	474,128.95	318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99
1941-42	1,183,269.29	576,762.26	606,507.03
1942-43	962,350.89	574,732.49	387,618.40
1943-44	975,072.60	574,525.05	400,547.55
1944-45	1,193,033.72	638,765.27	554,268.45

GAME

Herewith is a summary of conditions as they apply to the various species of game animals and birds which are to be found in Ontario, compiled principally from reports which have been supplied to the Department by our field officers throughout the Province:—

DEER:—While it should be stated that this species of excellent game animal is not too plentiful in many of the southwestern and southeastern counties in which entire protection throughout the year has been provided over an extended period of time, it is noted that in most of these counties increasing numbers have been observed, and in some cases to such an extent has this improvement continued that a short period of open season was provided in six different townships, details of which are set forth herewith:—

(a) From November 20th to 23rd, 1944, in the Townships of Aldborough and Dunwich in the County of Elgin, and in the Township of Wilmot in the County of Waterloo;

(b) From November 22nd to 25th, 1944, in the Township of East Gwillimbury in the County of York; and

(c) From November 20th to 25th, 1944 in the Townships of Mountain and Williamsburg in the County of Dundas.

Special hunting licenses were provided for this open season, and these licenses were issued to those interested by the respective Township Clerks.

In connection with this season the following regulations were provided to govern,—

That the use of dogs for such hunting would not be permitted;

That hunters would be required to use shot-guns with either buck-shot or S.S.G shells for ammunition;

That the use of rifles would be prohibited; and

That hunters would be permitted to take only one deer, either buck or doe, over the age of one year.

In addition to this a special open season for deer was provided, on the recommendation of the County Council, in that portion of the county of Carleton lying west of the Rideau River, from November 6th to 21st, 1944, and during which open season the general provisions which apply to the hunting of deer were in effect:

By an amendment to the Game and Fisheries Act provided by the Legislative Assembly during the Session of 1944, and as a means of further protection, the following additional counties and portions of counties were included in that part of the Province in which an entire close season for deer prevails, viz:— the Counties of Durham, Northumberland and Prince Edward, that portion of the County of Ontario lying south of the north boundary of Scott and Brock Townships, the Township of Howe Island in the County of Frontenac and the Township of Cambridge in the County of Russell.

In those portions of Ontario in which an open season for the taking of deer is established by the general provisions of the Game and Fisheries Act it may be stated that favorable conditions prevailed for the successful hunting of these animals, and as has been indicated by reference made earlier in this report this is substantiated by the fact that again thousands of resident and non-resident hunters secured licenses to authorize them to partake of the privileges thus available and enjoy the recreational pleasures which such hunting provides during the period of the regular open season in the fall of the year.

MOOSE:—The prevalence of these animals in numbers to warrant successful hunting of the same is confined to scattered areas principally in the districts situated in that part of Ontario lying north and west of the French and Mattawa Rivers and Lake Nipissing, and while such conditions do prevail the reports which have been submitted do not indicate much improvement with a few local exceptions.

Open seasons were provided for the hunting of moose:—

(a) From November 13th to 21st, 1944, in the Townships of Alice, Buchanan, Burns, Clara, Fraser, Head, Maria, McKay, Petawawa, Richards, Rolph and Wylie in the County of Renfrew; and

(b) From October 16th to 31st in the area east of the C.P.R. and C.N.R., from Bigwood to Westree and south of the road from Westree to the Ontario-Quebec interprovincial boundary in the vicinity of New Liskeard.

These special seasons were in addition to the regular periods of open season provided by the Game and Fisheries Act.

As has been previously stated in this report there was a total of 1,528 licenses, resident and non-resident, issued for the hunting of moose and while

this represents an increase of twelve per cent. over the figures of the previous year, the increase is principally made up by the improved sale of such licenses to non-resident hunters.

CARIBOU:—There are but few parts of Ontario in which this species is reported to exist, and their numbers apparently are extremely scarce. A survey of the reports received reveals the fact that they have been observed in scattered and extremely small herds only in the districts of Sudbury, Algoma, Thunder Bay and Kenora. It would appear that there is little or no reason to anticipate any noticeable improvement in a general way even though local increases have occurred, and the protection afforded by the complete close season which has prevailed in the past will be necessary to maintain this species even at its present limited level.

ELK:—Such specimens of elk as are found in Ontario at this time are attributable to the efforts of the Department in the past to re-establish this species in this Province. As stated in previous annual reports the original stock was secured from Western Canada with the co-operation of the National Parks Branch of the Federal Government. Their numbers are still quite few, and they are, of course, to be found only in the areas in which they have been liberated, that is in certain portions of the Counties of Bruce, Simcoe and Peterborough in the southern portion of the Province, and in the Districts of Algoma, Nipissing, Sudbury and Thunder Bay in Northern Ontario. This species is naturally provided the protection of an entire close season.

BUFFALO:—A small herd of buffalo was received in Ontario from Alberta some five years ago. These animals were placed on the Burwash Crown Game Preserve located in the District of Sudbury. Little or no improvement has been reported.

BEAR:—In those parts of Ontario in which suitable habitat prevails these animals continue to be sufficiently plentiful to be somewhat of a nuisance to those engaged in agricultural pursuits, and the damage to domestic flocks and herds has been sufficiently extensive to warrant the provision of a regulation for the payment of bounty to encourage the destruction of bear under certain circumstances. This regulation provides for the payment of this bounty on bears which have been killed in settled agricultural areas in specified portions of the Province and details of the operations under this regulation are provided elsewhere in this report.

In addition to constituting the nuisance related in the previous paragraph this species is sufficiently plentiful in many sections to afford a measure of successful hunting for the sportsmen who are interested in such pursuit, and in this connection it is very interesting to note that we have quite a number of United States residents who visit Ontario to participate in the hunting of bear during the season which is provided each year between April 1st and June 15th.

RABBITS:— In Ontario three species of rabbits are known to exist, viz:— cotton-tail, the European Hare (or jack-rabbit), and the snowshoe rabbit (or varying hare). The cotton-tail rabbit is native to practically all of the southern counties, the jack-rabbit is restricted pretty well to the southwestern counties, though reports indicate some extension to the eastern counties and some northern districts in the southern portion of the Province, while the snowshoe rabbit is prevalent in the various northern Ontario districts as well as in some of the northern districts and eastern counties in southern Ontario.

These animals were sufficiently plentiful in most sections to warrant the conclusion that they continue to provide very enjoyable and successful hunting particularly during the late fall and early winter months. Notwithstanding this favour-

able conclusion there are naturally some sections in which reports state that there has been a diminution of the numbers of rabbits, but in no case would this be applicable to more than one of the species which were prevalent therein.

It is undoubtedly true that the favourable hunting which rabbits provide is a source of considerable satisfaction to the hunters who are interested, and their numbers are legion, and provides a condition which is greatly appreciated.

PARTRIDGE:— The general conditions which applied to the various species of partridge native to this Province, judging from the reports submitted, was none too favourable in many portions of Ontario, nevertheless there were other sections in which it was indicated that their numbers were sufficiently plentiful to justify the provision of a restricted period of open season.

The regulation which established this open season provided that it would prevail in that portion of Ontario lying south of the French and Mattawa Rivers and Lake Nipissing, except in those counties lying south and west of, but not including the counties of Huron, Bruce, Grey, Dufferin, Simcoe and Ontario, and in the districts of Nipissing, Temiskaming, Cochrane, Sudbury, Manitoulin, and Algoma. It will be noted that in addition to the southwestern counties previously referred to this open season was not in effect in the northern districts of Thunder Bay, Rainy River and Kenora. Two periods were included in this open season, i.e., from October 7th to 14th, 1944, and from November 6th to 11th, 1944. It was further provided "that no person shall take or kill such birds in excess of five (5) per day in all, or twenty-five (25) in all during the aforesaid two periods, or have in possession at any time such birds in excess of the numbers herein prescribed."

No provision was made to permit the hunting of partridge in the townships established as Regulated Game Preserve Areas, on the days on which the hunting of pheasants was permitted, as had been the case in previous years.

HUNGARIAN PARTRIDGE:— In connection with this species it would be apparent that while there are quite a few of the southern Ontario counties in which scattered small flocks are to be found there are very few extensive areas in which they have been observed. Perhaps the best areas are located in the extreme southwestern counties of Essex and Kent and adjoining counties and in the eastern counties of Dundas and Stormont, but their numbers are not too plentiful even in these counties. These birds are not native to the Province and those which are now found here are the result of re-stocking undertaken in previous years by the Department.

During the year 1944 the hunting of these birds was provided by regulation effective on three days only, October 26th, 27th and 28th, in the counties of Essex and Kent. The regulation which governed established a bag limit of two (2) birds per day.

PHEASANTS:— The Department continued its policy of purchasing and liberating pheasants for the restocking of the various Township Regulated Areas, and in other areas in which suitable conditions for the development of these birds exist. This policy was inaugurated some years ago and has been continued with the object of establishing this species in suitable areas and in which it may be practicable to declare a period of open season. According to statistics which have been compiled in the Department, a total of 11,896 pheasants were secured from three bird farms operating in Norfolk, Northumberland and Victoria Counties. Of this number, 9,972 were distributed in varying quantities throughout the Regulated Townships, 1,907

for general re-stocking in other areas, and the remaining 17 were allotted to private individuals to assist them in their efforts to improve their own private flocks.

Details of this distribution are contained in the following table:

County	Township	Poult	Adults	Total
Brant	Burford	150		330
	South Dumfries	105		
	Onondaga	75		
Elgin	Aldborough	105		465
	Bayham	90		
	Dorchester	90		
	Dunwich	90		
	Malahide	90		
Haldimand	Canboro	90		795
	Cayuga North	90		
	Cayuga South	75		
	Dunn	75		
	Moulton	105		
	Seneca	90		
	Sherbrooke	60		
	Walpole	105		
	Oneida	60		
	Rainham	45		
Halton	Esquesing	135		705
	Nassagawega	105		
	Nelson	210		
	Trafalgar	255		
Lambton	Plympton	120		120
Middlesex	Metcalfe	90		405
	Westminster (X)	305	10	
Lincoln	Caistor	90		825
	Clinton	105		
	Gainsboro	120		
	Grimsby North	60		
	Grimsby South	75		
	Grantham (X)	105	10	
	Louth	105		
	Niagara (X)	135	20	
Norfolk	Middleton	90		480
	Townsend	150		
	Windham	150		
	Walsingham	90		
Ontario	Pickering	210	105	555
	Whitby East	120		
	Whitby West	120		

County	Township	Poults	Adults	Total
Oxford				300
	Dereham	120		
	Oxford East	180		
Peel				923
	Albion	105		
	Caledon	105		
	Chinguacousy	270	52	
	Toronto	240	42	
	Toronto Gore	90	19	
Prince Edward				90
	Marysburgh South	90		
Welland				1245
	Bertie	120		
	Crowland	120		
	Humberstone	120		
	Pelham	135		
	Stamford	255		
	Thorold	120		
	Wainfleet	120		
	Willoughby	255		
Wellington				150
	Puslinch	150		
Wentworth				795
	Ancaster	135		
	Barton	105		
	Beverley	105		
	Binbrook	75		
	Flamboro East	90		
	Flamboro West	90		
	Glanford	79		
	Saltfleet	120		
York				1,789
	Gwillimbury East	165		
	Gwillimbury North	165		
	King	240		
	Markham	274	105	
	Scarborough (X)	245	10	
	Vaughan	180	105	
	Whitchurch	300		

(X) — Includes a total in all of 315 birds supplied to the Ontario Bird Dog Association, and released during dog trials, as follows: Grantham 10, Niagara 155, Scarborough 45 and Westminster 105.

GENERAL RE-STOCKING

COUNTY or DISTRICT		POULTS	ADULTS	TOTAL
Bruce		12		12
Essex	Mainland	610	193	
	Pelee Island	238		1,041
Kent		600	155	755
Manitoulin		12		12
Northumberland		45		45
Peterborough		30		30
Sudbury		12		12
Totals		1559	348	1,907

Arrangements were made to provide open seasons for pheasants as follows:

(a) In the following townships established as Regulated Game Preserve Areas, viz:—

South Marysburgh in Prince Edward County;
 Pickering, Whitby, and East Whitby in Ontario County;
 East Gwillimbury, North Gwillimbury, King, Markham, Scarborough,
 Vaughan and Whitchurch in York County;
 Albion, Caledon, Chinguacousy, Toronto (part) and
 Toronto Gore in Peel County;
 Esquesing, Nassagawega, Nelson and Trafalgar in Halton County;
 Puslinch in Wellington County;
 Ancaster, Barton, Beverly, Binbrook, East Flamboro, West Flamboro
 Glanford and Saltfleet in Wentworth County;
 Bertie, Crowland, Humberstone, Pelham, Stamford, Thorold,
 Wainfleet and Willoughby in Lincoln County;
 Canboro, North Cayuga, South Cayuga, Dunn, Moulton, Oneida, Rainham,
 Seneca, Sherbrooke, and Walpole in Haldimand County;
 Burford, South Dumfries and Onondaga in Brant County;
 Middleton, Townsend, North Walsingham and Windham in
 Norfolk County;
 Dereham and East Oxford in Oxford County;
 Aldborough, Bayham, South Dorchester, Dunwich and
 Malahide in Elgin County;
 on October 20th and 21st, 1944.

(b) In the following townships established as Regulated Game Preserve Areas, viz:—

Caistor, Clinton, Gainsboro, Grantham, North Grimsby, South Grimsby,
 Louth and Niagara in Lincoln County;
 on October 20th, 21st and 25th, 1944.

(c) In the following townships established as Regulated Game Preserve Areas viz:—

Metcalfe and Westminster (part) in Middlesex County; and
 Plympton in Lambton County;
 on October 26th and 27th, 1944.

In connection with the various seasons in the aforementioned township

Regulated Game Preserve Areas the regulation which governed stipulated a bag limit of three cock birds per day. It was further provided that the special township hunting license was required by hunters in addition to the regular hunting license demanded by the provisions of the Game and Fisheries Act.

(d) On Pelee Island on October 26th and 27th, 1944. The regulation in this instance provided that "no person shall take, kill or have in possession such birds (pheasants) in excess of five per day, two of which shall be hen birds"; and, as in the case of the open seasons in the Regulated Township Areas, a special township hunting license was required by hunters who participated in this open season on Pelee Island. All hunting on Pelee Island was prohibited during the period from October 19th to 25th, 1944, that is, during the week previous to the pheasant shoot.

(e) In the counties of Essex and Kent on October 26th, 27th and 28th, 1944, with a provision for a bag limit of three cock birds per day.

QUAIL:— Conditions as they apply to this species are not favourable, nor does information regarding their prevalence indicate much improvement over previous years. There are but few sections in which there is any evidence of their existence, and they are generally speaking confined to the most southerly counties. The only section in which an open season was provided was in the counties of Essex and Kent, and in which counties the open season coincided with that which prevailed with respect to pheasants, viz:— October 26th, 27th and 28th. The regulation in effect provided a bag limit of four birds per day in the case of quail.

DUCKS:— The various species of wild ducks which are available in Ontario during the open season which occurs during the southerly migration of these birds in the fall of the year were reported to be quite plentiful in many sections of the Province, though there are some areas, particularly in Northern Ontario in which such favourable conditions do not prevail. The hunting provided by this species of waterfowl represents a substantial measure of enjoyment to the sportsman who is interested in this division of our wild-life. The regulations which govern are provided by the Federal Government under the provisions of the Migratory Birds Convention Act. The complete protection of a close season throughout the year was continued in the case of wood duck, while the hunting of eider duck was permitted, as in past years, only north of the Quebec-Cochrane-Winnipeg line of the Canadian National Railway from September 15th to November 15th. The only change in the regulations which apply was in respect to the period of the open season which was extended five days throughout the Province, and in the northern division the season closed on December 5th instead of November 30th as had been previously provided, while in the southern division the season closed on December 15th instead of December 10th.

GEESE:— Favourable shooting conditions with respect to this species do not prevail to any great extent in Ontario. Generally speaking such conditions exist only in the extreme northerly portion of the Province, along the western shore of James Bay, the southerly extension of Hudson's Bay, and in two or three counties in the southwestern peninsula. They are observed in scattered areas during the periods of migration, but in such cases they offer little or no attraction to hunters.

The period of open season which is provided is similar to that which is in effect in the case of ducks as is related in these comments on the last mentioned species with the exception that in the counties of Essex, Kent and Elgin the open season was from November 1st to January 10th, an extension of eight days over the season which previously existed and which ended on January 2nd.

The species Brant are provided the protection of a complete closed season throughout the year.

WOODCOCK:— General conditions as they apply to this species of game bird are not too satisfactory. They are reported to exist in various portions of Ontario, but except in some scattered sections they are not sufficiently plentiful to encourage hunters to participate in such hunting as is provided under the Migratory Bird Regulations.

In 1944 the open season on woodcock extended from October 1st to 31st, and the regulations which governed specified a bag limit of eight per day and a seasonal bag limit of one hundred birds.

SNIFE:— Conditions somewhat similar to those which prevail in connection with woodcock are evident with respect to snipe. There are some sections in which they provide desirable sport, but generally speaking they are not too plentiful.

The open season extended from September 15th to November 15th in the northern division and from October 1st to November 30th in the southern division. The bag limits were reduced considerably in 1944, the daily limit being decreased from twenty to eight, and the seasonal limit decreased from two hundred to fifty.

PLOVER:— Reports from field offices indicate that while these birds may be found in most parts of the Province, they are not at all plentiful except in a few widely separated counties, and the protection of an entire close season as is provided under the Migratory Birds Convention Act is justified by these conditions. There are some areas in which improvement has been observed, though such increase is in no way general nor too noticeable.

FUR-BEARING ANIMALS

Following is a summary of the conditions which apply throughout the Province to the various species of fur-bearing animals which are known to exist here, and which remarks are based on the reports submitted by members of the Field Service staff of the Department:—

BEAVER:— These animals continue to provide a good proportion of the financial returns accruing to trappers from their trapping operations. Conditions as they apply to this species continue to be quite favourable in many sections and more particularly in the remoter areas in which circumstances suitable to their propagation and increase prevail. Such suitable circumstances are undoubtedly augmented by the intensive efforts put forth by members of the enforcement service commensurate with their other duties, to secure as strict observance as they possibly can of the provisions of the Game and Fisheries Act established for the protection and development of this very desirable fur-bearer. There are, of course, many portions of the Province in which such favourable conditions with regard to numbers do not exist, and in these sections they are rigidly protected and an entire close season prevails.

The following open seasons were provided during the year 1944:

(a) Throughout Northern Ontario (except the District of Rainy River and that portion of the District of Kenora lying south of the main transcontinental line of the Canadian National Railway), and in the districts of Parry Sound, Muskoka, and Nipissing (South), the counties of Haliburton, Lanark and Renfrew, and those portions of Hastings, Lennox, and Addington and Frontenac lying north of num-

ber 7 Highway.

Trappers were allowed to take not more than ten beaver during this open season, and while the territory in which this open season prevailed was not as extensive as that in which such open season was provided in the previous year the catch of beaver in 1944 exceeded by approximately 6,000 the catch of the previous year.

(b) In the county of Grey and in the townships of Orillia and Matchedash in the county of Simcoe, under the following conditions, viz: that trapping operations for beaver would be restricted to licensed trappers and farmers residing in the respective areas; that each trapper or farmer should take not more than ten beaver during such open season, and that such pelts as were taken were to be forwarded to the Department for disposal by us on behalf of the respective trappers concerned.

The period of open season in each instance extended from December 1st to 21st.

It has been revealed by Departmental records that there were some 38,070 pelts taken during these periods of open season, an increase of practically fifteen per cent over the catch recorded during the season in the previous year.

It is computed that these pelts had a value to the trappers of some \$1,366,713.00, which is in excess of twenty-five per cent of the total value of the entire fur catch taken during the fiscal year 1944-45.

FISHER:— Very few of these animals are trapped during the season which extends from November 1st to February 28th, and while there was an increase in the number taken during the 1944-45 season as compared with the number taken in the previous season, reports from officers show that any improvement in the case of this species is very restricted and confined to scattered localities.

FOX:— This species continues to be quite plentiful in practically every section of the Province and they are not only causing considerable damage to domestic poultry flocks but they are also responsible for some of the decrease reported among certain species of game birds. Several township councils have provided by-laws under the authority of which such municipalities pay bounties under certain conditions on foxes killed within the boundaries of the respective townships. This extreme prevalence of foxes resulted in the Department continuing the arrangement which relaxed the legislation which provided the protection of a close season on these animals in the counties of Brant, Durham, Elgin, Essex, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Northumberland, Oxford, Peel, Perth, Prince Edward, Waterloo, Welland, Wellington, Wentworth and York. In these counties it was also provided that dogs could be used for the hunting of foxes without permit, as is required by existing provisions of the Game and Fisheries Act. As is indicated further on in this report there were 43,185 red foxes taken during 1944-45 which was a decrease of more than 10,000 as compared with the number which was taken in the previous year.

LYNX:— These animals continue to be extremely scarce throughout the Province, and they are practically non-existent in southern Ontario. There are no reports to indicate they are increasing anywhere in the Province, although there was an increase in the number taken during the year under review.

MARTEN:— The conditions applicable to marten are somewhat similar to those

reported in connection with fisher and lynx. This species is extremely scarce throughout the entire area, and they are practically extinct in the southern portion of the Province. As in the case of fisher, the season in this case extends from November 1st to February 28th. Trappers take but a limited number of marten during the season, though there was a slight increase in 1944-45.

MINK:— This species continues to be fairly plentiful and is available in many sections of Ontario. The open season which prevails extends from November 1st to February 28th. It is one of the more desirable species of fur-bearing animal available to trappers. Returns compiled in the Department show that between fifteen and twenty per cent of the total amount received by trappers from their entire fur catch of 1944-45 was derived from the sale of mink. The catch of mink for the year under review decreased seventeen per cent in comparison with that of the previous year.

MUSKRAT:—General conditions with reference to muskrat continue to be quite favourable in practically every section of the Province and the revenue earned by trappers from the sale of these pelts constitutes their principal source of income. It has been estimated that 38 per cent of the total value of the entire fur catch in 1944-45 was attributable to the sale of muskrats. The 1944-45 catch exceeded by approximately 100,000 pelts the number which was taken in 1943-44.

The open season which is in effect is provided annually by regulation to coincide as far as possible with suitable weather conditions in the various sections. In the past the periods of this open season have been omitted from this report for the reason that in many instances the season commences in one fiscal period and terminates in the succeeding fiscal period. However, it may be desirable for purposes of record to incorporate in this report details of such open season, and to inaugurate this decision this open season which prevailed in 1944 will be recorded.

Period of Open Season

County or District	From	To
Brant	March 10th	April 22nd
Bruce	April 1st	May 1st
Carleton	April 1st	May 5th
Dufferin	March 10th	April 26th
Dundas	March 10th	May 1st
Durham	March 10th	May 1st
Elgin	March 1st	April 5th
Essex	March 1st	April 5th
(X) Frontenac (S)	March 10th	May 1st
(X) Frontenac (N)	April 1st	May 5th
Glengarry	March 10th	May 1st
Grenville	March 10th	May 1st
Grey	April 1st	May 1st
Haldimand	March 1st	April 5th
Haliburton	April 1st	May 10th
Halton	March 10th	April 26th
(X) Hastings (S)	March 10th	May 1st
(X) Hastings (N)	April 1st	May 5th
Huron	March 10th	April 26th
Kent	March 1st	April 5th
Lambton	March 10th	April 22nd
Lanark	April 1st	May 5th
Leeds	March 10th	May 1st
(X) Lennox and Addington (S)	March 10th	May 1st
(X) Lennox and Addington (N)	April 1st	May 5th

Period of Open Season

County or District	From	To
Lincoln	March 10th	April 22nd
Middlesex	March 10th	April 22nd
Muskoka	April 1st	May 10th
(X) Nipissing (S)	April 1st	May 10th
Norfolk	March 1st	April 5th
Northumberland	March 10th	May 1st
(X) Ontario (S)	March 10th	May 1st
(X) Ontario (N)	April 1st	May 5th
Oxford	March 10th	April 22nd
Parry Sound	April 1st	May 10th
Peel	March 10th	April 26th
Perth	March 10th	April 26th
(X) Peterborough (S)	March 10th	May 1st
(X) Peterborough (N)	April 1st	May 5th
Prescott	April 1st	May 5th
Prince Edward	March 10th	May 1st
Renfrew	April 1st	May 10th
Russell	April 1st	May 5th
(X) Simcoe (S)	March 10th	April 26th
(X) Simcoe (N)	April 1st	May 1st
Stormont	March 10th	May 1st
(X) Victoria (S)	March 10th	May 1st
(X) Victoria (N)	April 1st	May 1st
Waterloo	March 10th	April 26th
Welland	March 1st	April 5th
Wellington	March 10th	April 26th
Wentworth	March 10th	April 22nd
York	March 10th	April 26th
Algoma	April 21st	May 21st
Cochrane	April 21st	May 21st
Kenora	April 21st	May 21st
Manitoulin	April 21st	May 21st
(X) Nipissing (N)	April 21st	May 21st
Patricia	April 21st	May 21st
Rainy River	April 21st	May 21st
Sudbury	April 21st	May 21st
Temiskaming	April 21st	May 21st
Thunder Bay	April 21st	May 21st

(X)—The dividing lines between the northern and southern areas in these counties and districts are as follows:

Highway No. 7 in the counties of Frontenac, Hastings, Lennox and Addington, Peterborough and Victoria.

The Mattawa River in the district of Nipissing.

The north boundary of the townships of Brock and Scott in the county of Ontario.

The north boundary of the townships of Tossorontio, Essa and Innisfil in the county of Simcoe.

OTTER:—These animals are extinct in many of the southern Ontario counties, and conditions in the areas in which they do exist are not very favourable. The number trapped during the year shows an increase, but they do not provide any important portion of the revenue received by trappers in general. The period of open season extends from November 1st to February 28th.

RACCOON:—It is only in that part of Ontario south of the French and Mattawa Rivers that these animals are found. The pelts of this species are not in great demand. Conditions which apply to the prevalence of raccoon remained about the same and while the total catch showed a decline during the year it was better

than the average catch over the previous five years. The open season for the taking of raccoon extends from November 1st to December 31st.

SKUNK:—As in the case of raccoon, these pelts are not in great demand, and the prices paid for them do not encourage trappers in their attempts to take these animals. They are quite plentiful in practically every section of the province, though there was a considerable decline in the catch during 1944-45 in comparison with that of the previous year.

WEASEL:—Conditions with reference to weasel are variable, and though they are plentiful in many counties and districts the value of their pelts is not sufficient to encourage intensive operations for the trapping of this species. The catch during 1944-45 was about normal though somewhat decreased.

The following is a comparative table showing the numbers of pelts of the several varieties of fur-bearing animals taken in Ontario, and which were either exported or dressed, during the fiscal year 1944-45, as well as figures for the three preceding years.

	1941—42	1942—43	1943—44	1944—45
Bear	384	288	269	306
Beaver	25,197	24,194	32,266	38,070
Fisher	884	691	1,035	1,219
Fox (Cross)	1,780	2,649	4,350	3,691
Fox (Red)	32,215	31,297	53,205	43,185
Fox (Silver or Black)	206	265	499	449
Fox (White)	114	185	33	22
Lynx	537	552	646	938
Marten	1,652	1,417	1,610	1,701
Mink	63,996	60,331	52,289	43,098
Muskrat	722,387	642,810	683,450	782,220
Otter	3,880	3,557	3,964	4,650
Raccoon	13,499	13,420	20,664	17,381
Skunk	94,656	48,337	79,298	45,117
Weasel	80,776	62,553	67,461	62,859

Again trappers experienced a highly successful season, both from the standpoint of the numbers of pelts which were taken by them and their financial returns received from the sale of these pelts. The average price of fur declined somewhat during this period, but notwithstanding this decline it has been estimated that the value of the fur trapped in Ontario and disposed of in the fiscal year under review amounted in all to a total of \$5,138,126.68. As has been mentioned previously the principal pelts contributing to this sum were muskrat—\$1,955,550.00, beaver—\$1,366,713.00, mink—\$933,933.66 and red fox—\$302,295.00.

In addition Departmental records show that during this fiscal year licensed fur farmers as a result of their activities marketed the pelts of 22,085 silver and black foxes, 1,312 blue foxes and 76 cross foxes, and in addition the pelts of 58,539 mink, all of which had an estimated value of \$1,852,084.49, which was approximately the same amount as that received during the previous year.

It will therefore be observed that the fur produced and sold by trappers and licensed fur farmers in the fiscal year under review was marketed for a total sum of \$6,990,211.17

FUR FARMING

While wartime problems continued to beset the fur breeder, and the future market for raw furs was somewhat uncertain, there was sufficient demand to maintain prices at a level commensurate with the rising cost of operation. The industry continued on practically the same scale as in the previous year. 1220 fur farmers' licenses were issued during the year 1944 — 1091 renewals and 129 new licenses.

THE FOLLOWING IS A SUMMARY OF THE BREEDING STOCK ON LICENSED FUR FARMS AS AT JANUARY 1st

	1942	1943	1944	1945
Beaver	18	21	23	44
Fisher	16	15	12	14
Cross Fox	112	68	58	64
Red Fox	73	96	123	106
Silver Black Fox	15,630	12,901	12,114	11,238
Blue Fox	644	595	838	955
Platinum Fox	X	125	729	1,514
White Marked Fox	X	1,379	2,030	2,629
Lynx	2	2	0	2
Marten	19	15	20	17
Mink	38,650	29,345	33,971	36,912
Muskrat	119	52	0	26
Raccoon	124	121	155	128
Skunk	5	2	0	1

FUR FARMS IN ONTARIO

For the Year 1944 by County or District

County or District.	1944	County or District.	1944	County or District.	1944
Algoma	16	Kenora	22	Prescott	7
Brant	8	Kent	20	Prince Edward	6
Bruce	48	Lambton	13	Rainy River	22
Carleton	24	Lanark	81	Renfrew	55
Cochrane	7	Leeds	15	Russell	6
Dufferin	4	Lincoln	7	Simcoe	74
Dundas	4	Manitoulin	15	Stormont	5
Durham	5	Muskoka	8	Sudbury	8
Elgin	8	Middlesex	44	Timiskaming	11
Essex	14	Nipissing	4	Thunder Bay	73
Frontenac	21	Northumberland	3	Victoria	17
Glengarry	4	Ontario	28	Waterloo	43
Grenville	8	Oxford	20	Welland	6
Grey	78	Norfolk	10	Wellington	24
Haldimand	19	Parry Sound	14	Wentworth	29
Halton	24	Peel	16	York	112
Hastings	8	Perth	41		
Huron	56	Peterboro	5		
					1,220

WOLF BOUNTIES

The following is a comparative statement showing annual wolf bounty statistics for a period of five years ending with the fiscal year 1944-1945.

Period	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1941	738	400	8	1,146	\$16,477.43
For year ending Mar. 31, 1942	1,199	577	37	1,813	40,593.77
For year ending Mar. 31, 1943	935	497	32	1,464	33,606.62
For year ending Mar. 31, 1944	1,302	731	32	2,065	46,545.75
For year ending Mar. 31, 1945	1,321	665	12	1,998	45,993.58

WOLF BOUNTY

Pursuant to the provisions of the Wolf Bounty Act, the continued destruction of wolves was encouraged at prevailing rates of bounty, \$25.00 on an adult timber or brush wolf, and \$5.00 on a pup under 3 months of age.

It is noted from Department records that more wolves were taken during each of the last two fiscal years than in any year since 1937. This is indicative of the increase in the wolf population and that favourable weather conditions during the winter months are an important factor in the hunting and destruction of predators.

WOLVES KILLED

WOLF BOUNTY CLAIMS

Fiscal Year Ending March 31st, 1945

The following table indicates the total number of wolves killed in each of the Counties and District and in respect of which applications for payment of bounty were submitted.

County	Number of Timber	Number of Brush	Number of Pups	Total Wolves
Brant	0	1	0	1
Bruce	8	21	0	29
Carleton	0	8	0	8
Durham	0	2	0	2
Essex		1	0	1
Frontenac	11	19	0	30
Grenville		1	0	1
Grey		2	0	2
Hastings	26	4	0	30
Huron	4	0	0	4
Kent	0	1	0	1
Lambton	0	9	4	13
Lanark	8	4	0	12
Leeds	2	0	0	2
Lennox & Add.	10	8	0	18
Norfolk	0	4	0	4
Northumberland	0	1	0	1
Peterborough	6	0	0	6
Renfrew	26	12	0	38

Simcoe	15	5	0	20
Victoria	0	22	0	22
Wellington	0	1	0	1
York	0	10		10
TOTAL COUNTIES	116	136	4	256
DISTRICTS				
Algoma	64	71	6	141
Cochrane	28	0	0	28
Haliburton	20	1	0	21
Kenora	311	113	0	424
Manitoulin	33	91	0	124
Muskoka	26	2	0	28
Nipissing	83	24	0	107
Parry Sound	55	4	0	59
Patricia	128	17	0	145
Rainy River	140	83	2	225
Sudbury	108	69	0	177
Temiskaming	20	0	0	20
Thunder Bay	191	56	0	247
TOTAL DISTRICTS	1,207	531	8	1,746
Grand Total	1,323	667	12	2,002

The Department continued the practice instituted on November 1st 1942, of giving to the Seaman's Fur Vest War Project, the wolf pelts submitted in support of applications for payment of bounty. These pelts were manufactured into fur vests by volunteer workers and were made available to personnel of the Naval Service and Merchant Marine.

BEAR BOUNTY

The payment of bounty to control the population of bears was continued. The regulations provided for a bounty of \$10.00 on bears killed between April 15th and November 30th by a bona fide resident of a township, located in certain counties and districts, and of which 25% of the total area was devoted to agriculture.

The Department received 774 applications for bounty on 910 bears killed during the period covered by this report. Payment of 26 of these claims involving 31 bears, was disallowed however, due principally to the fact that 25% of the total area of the township in which the bears were killed, was not devoted to agriculture. The total bounty paid therefore, was \$8,790.00 for 879 bears.

County or District

Algoma	37
Cochrane	166
Kenora	27
Manitoulin	7
Muskoka	18
Nipissing	92
Parry Sound	81

Rainy River	84
Sudbury	66
Thunder Bay	10
Temiskaming	177
Haliburton	15
Bruce	5
Frontenac	7
Hastings	46
Lennox & Addington	10
Peterborough	6
Renfrew	54
Victoria	2
Total	910

TOURIST OUTFITTERS

While travel restrictions and similar unfavorable conditions curtailed the volume of tourist traffic and many camps could not operate at full capacity during the season, most of the camp operators renewed their licenses in 1944. Five hundred and sixty Tourist Outfitters' Camp Licenses were issued during the period covered by this report, an increase of twenty-one, as compared with such licenses issued during the previous year.

There was considerable interest in post war expansion. Ninety-three applications for permits to establish camps were considered, of which fifty-five were granted. Twenty-one were refused and seventeen were in abeyance at March 31st., 1945. Ten new camps were completed and licensed during the year.

Details regarding location of the camps licensed to operate during the year, are as follows: —

Algoma	77
Cochrane	7
Kenora	137
Manitoulin	48
Nipissing	76
Parry Sound	104
Patricia	1
Rainy River	28
Renfrew	12
Sudbury	48
Timiskaming	5
Thunder Bay	17
Total	560

CROWN GAME PRESERVES

This phase of the Department's conservation work is an important factor in the development and perpetuation of the wild-life of the Province. In the northern part of Ontario much of the sanctuary reserved for game is contained within Crown Lands. These are mostly bush lands,—sometimes wild and frequently inaccessible,—providing a natural environment and offering food and cover under the

best possible conditions. While these areas are quite extensive every effort is made to protect them against poachers, field officers making frequent patrols into and around the various preserves. Wild-life development within these areas has been very satisfactory while adjacent territory has benefited from the overflow.

In the southern part of the Province, where the lands are mostly privately owned and largely of an agricultural nature, there is a considerable number of small sanctuaries, serving a useful purpose in the protection and development of upland game birds and animals. These areas have been set aside with the co-operation of the landowners who are for the most part vigilant in protecting any game which may be found on their lands.

No additions to these Crown Game Preserves have been made during the period under review.

LEGISLATION AND REGULATIONS

Amendments to the Game and Fisheries Act were provided during 1944 as follows:—

- (a) Provision to establish fur royalties by regulation;
- (b) Extending the southerly boundary of division (b) for the purposes of hunting deer and moose therein. Additional townships formerly located in division (c) were included in division (b) by this amendment;
- (c) Adding the counties of Durham, Northumberland, Prince Edward, the township of Howe Island, the township of Cambridge, the townships of Scott and Brock and all townships south thereof in the county of Ontario to the areas in which the hunting of deer is prohibited at all times;
- (d) Establishing portions of the district of Parry Sound and the district of Nipissing south of the Ottawa and Mattawa Rivers as a separate division for the hunting of deer, and providing for the open season for such purpose therein;
- (e) A later open season for deer in that portion of southern Ontario defined as division (ddd);
- (f) Including farmers' sons in the exemption provided in subsection 4 of Section 10 (gun licenses) when hunting on such farmers' lands;
- (g) Clarification of the provisions of subsection 3 of Section 15 relating to tourist outfitters;
- (h) Extending the provision which requires possession of licenses to sell nets, to include in addition to gill nets, hoop nets, pound nets and seine nets.
- (i) Extension of the spring open season for bear, to extend from April 1st to June 15th.
- (j) Prohibiting the owners of greyhounds to pursue game or run at large on Sundays; and prohibiting the owners of dogs from permitting such dogs to molest game birds or disturb their nests during the months of April, May, June or July, except during approved field trials;
- (k) Prohibiting the possession of artificial lights at night by persons in possession of fire-arms capable of killing deer or moose;
- (l) Adding the counties of Halton, Northumberland and Ontario to those counties in which the use of snares is prohibited at all times;
- (m) Adding the counties of Lincoln, Wentworth and York to those counties in which there is a bag limit of six cotton-tail rabbits per day; and prohibiting the sale of such rabbits in these counties;
- (n) Prohibiting the discharge of any fire-arm from or across the King's Highway; and
- (o) Authorizing the export by non-resident hunters of "additional

small game animals and birds not in excess of the numbers authorized to be killed or taken by this Act (Game and Fisheries Act) or the regulations in respect of which special open seasons may be provided."

Amendments to the Special Fishery Regulations for the Province of Ontario in 1944 were as follows:

(a) The open season for black bass and maskinonge in all the waters of Lake Erie was changed to extend from June 25th to December 15th; and

(b) The open season for black bass and maskinonge in the waters of the River St. Lawrence was changed to extend from June 16th to October 15th.

Amendments to the Migratory Bird Regulations were in accordance with the details as outlined in the reference to ducks, geese and snipe previously recorded in this report.

ENFORCEMENT

This Department is responsible for the administration throughout Ontario of The Game and Fisheries Act and the regulations which may be provided thereunder, as well as The Special Fishery Regulations for the Province of Ontario provided by the Federal Government under The Fisheries Act (Canada), The Migratory Birds Convention Act, insofar as the regulations apply in Ontario, and The Wolf Bounty Act.

For the enforcement of this legislation the Department maintains a staff of Game and Fisheries Overseers whose services are augmented at different periods of the year, but principally during the period of the Spring Fish spawning season, by additional seasonal overseers. In addition members of the Ontario Provincial Police force co-operate with our regular officers to secure better observance of the various provisions of these legislative enactments and regulations.

The work of enforcement is also assisted by the efforts and co-operation of the hundreds of Deputy Game and Fishery Wardens who annually apply for such appointments. This co-operation with the regular Overseers by these Deputy Game Wardens is provided without expense to the public and serves a very useful purpose. It is more than probable that the services rendered by these honorary officers are generally speaking not to the extent of making seizures and prosecuting those who have been apprehended violating the provisions of the legislation with the enforcement of which we are charged, but rather for the purpose of advising and drawing to the attention of those who might be contemplating such violations the importunities which might result, and thus they act principally in a preventive rather than an enforcement capacity. They undoubtedly render good service on behalf of the general public, and it would be difficult to estimate the value of the assistance which is thus voluntarily provided.

In the performance of their duties enforcement officers did apprehend offenders on many occasions, and in such cases this action was followed by the seizure of equipment which was being employed in connection with the violations so witnessed. During the period of the fiscal year under review there were 1,247 cases in which seizures were made from such offenders. These seizures were the result of action provided by Game and Fisheries Overseers in 1146 cases, by Deputy Game and Fishery Wardens in 9 cases, by members of the Ontario Provincial Police Force in 25 cases, and by members of municipal police forces in 3 cases. In the remaining 64 cases the seizures resulted from action in which Overseers, Deputy Game Wardens and Provincial Police constables co-operated with each other.

The following is a summary of the articles which were placed under seizure in these actions, —

Live Animals and Birds	in 2 cases.
Birds, game animals and meat	in 142 cases.
Fire-arms and Ammunition	in 389 cases.
Fish	in 209 cases.
Nets and Fishing Equipment	in 140 cases.
Angling Equipment	in 152 cases.
Pelts and Hides	in 256 cases.
Traps and Trapping Equipment	in 154 cases.
Canoes, row-boats and motor-boats	in 14 cases.
Outboard Motors	in 9 cases.
Motor Vehicles	in 4 cases.
Flashlights and lanterns	in 25 cases.
Spears	in 49 cases.
Miscellaneous Articles	in 46 cases.

While the combined total of these various articles exceeds 1,247, the actual number of seizures made during the year, the discrepancy is accounted for by the fact that there are many seizures made in which articles in more than one of these classifications are included, such as fire-arms and game, traps and pelts, fishing tackle and fish, and in all the cases in which water-craft, outboard motors and motor vehicles are involved articles in other classifications would be included.

Departmental records disclose the fact that the fire-arms which were seized in these cases consisted of 177 small calibre fire-arms such as .22's and .25's, 95 larger calibre rifles, 1 revolver, 7 air guns, 58 single-barrel shot-guns, 69 double-barrel shot-guns, 18 repeater shot guns, and 1 automatic shot gun.

Details of confiscated pelts of fur-bearing animals are as follows:

Beaver	468
Fox	94
Lynx	1
Marten	2
Mink	71
Muskrat	382
Otter	56
Raccoon	64
Skunk	34
Squirrel	46
Weasel	31
Deer and Moose Hides	64

Charges were laid and subsequent prosecutions were undertaken in 1,085 cases in which violations of the Game and Fisheries Act and the various Regulations were involved. Following these charges and prosecutions convictions were registered and penalties imposed by the presiding magistrates in 1,034 of these cases. The charges were dismissed, principally for lack of supporting evidence, in 44 cases. In 6 cases the charges were withdrawn previous to the trial and in one case the defendant received a warning.

In connection with the 1,034 convictions which were registered, the charges were laid by Game and Fisheries Overseers in 1,005 cases, by Provincial Constables in 21 cases, and in the remaining 8 cases the charges followed information laid

jointly by Overseers and Provincial Constables.

In connection with the 44 cases in which the charges were dismissed the information was laid in 42 of these cases by Game and Fisheries Overseers, in one case by Provincial Constable and in the one remaining case jointly by Game and Fisheries Overseers and Provincial Constables.

Game and Fisheries Overseers were responsible for the 6 actions in which the charges were withdrawn, and were also responsible for the one action in which the defendant was warned.

REPORT OF THE FISH CULTURE BRANCH

Fish culture may be defined as any procedure for increasing the stock of fish. One of the procedures used extensively in Ontario, is the planting of hatchery raised fish. In the majority of cases this procedure is a supplement and not a substitute for nature's means of replenishment.

A study of the complex series of events which occur from the time the fish egg is fertilized until the end product, the fish, reaches sexual maturity discloses useful facts for developing advantageous procedures in fish culture. For example, fundamental fish culture research may result in the establishment of important principles governing successful planting.

During the year twenty-seven hatcheries and rearing stations were operated. In keeping with prevailing wartime restrictions, no new plants were established. The introduction to the report of the Fish Culture Branch for the year 1943-1944, contains information on the classification of the hatcheries and rearing stations, and the kinds and sizes of the fish cultured. Since this classification is substantially the same for this year it is unnecessary to report the details of it here.

THE CULTURE AND DISTRIBUTION OF FISH

Speckled Trout:

The distribution of speckled trout during the year was approximately as follows:

2,877,000 yearlings
493,840 fingerlings
4,360 adults

It is not the policy of the Department to plant fingerlings (under-yearlings) unless the accommodation at our rearing stations is taxed beyond their proper capacities. On account of crowded conditions at Chatsworth, Sault Ste. Marie, Dorion and Hill Lake, distribution was required until crowded conditions were alleviated.

Brown Trout:

The department is careful to avoid planting brown trout in streams that continue to support native speckled trout satisfactorily, or in streams that may be susceptible to improvement for the latter. The distribution of brown trout is confined to streams where there is scant possibility of their rehabilitation for speckled trout on a practical basis; the lower reaches of a number of streams cut off by dams from the upper reaches, where speckled trout still thrive, have been stocked with browns advantageously.

Planting of browns in suitable streams continues to yield fruitful results. During the year, the Department received many reports of excellent catches from waters which were previously barren of speckled trout, due largely to temperatures unsuitable for them.

Approximately 331,000 yearlings were planted this year, an increase of 90 per cent over the previous year's distribution.

Rainbow Trout:

(a) Steelhead:

It has long been recognized that steelhead rainbow have a tendency to migrate from streams in which they have been planted to larger waters such as the Great Lakes during their second year or when they are about a foot in length. On reaching sexual maturity, they ascend streams in spring and leave again after the completion of spawning. Hence they are available to anglers for only a short time, and consequently comparatively few are found in the fisherman's creel.

It is only in the larger rivers and lakes that rainbow trout are normally found, except during their immature stages. The St. Mary's, the Pine and certain of the larger parts of the Nottawasaga are examples of rivers in which rainbows remain throughout the year. They have survived chiefly in larger lakes, Superior, Georgian Bay and Lake Simcoe, which they inhabit for the most part, as adults.

Distribution was confined with few exceptions to the larger tumultuous rivers flowing into Georgian Bay and Lake Superior, and larger rivers and lakes of Southern Ontario where successful planting has been indicated.

Approximately 32,200 fingerlings and 4,000 yearlings were planted during the year.

(b) Kamloops Trout:

The monthly bulletin of the Department, February, 1946, vol. 1, No. 4, contains a detailed account of the life history, culture, and planting of Kamloops trout in provincial waters. As mentioned in the Annual Report 1943-44, many of our domesticated adult stock of Kamloops trout have not spawned satisfactorily within recent years. Consequently, until eggs can be secured from the stock that is being reared at Chatsworth Trout Rearing Station, the distribution of this species will be limited. Notwithstanding this difficulty, a distribution of 7,200 yearlings was carried out this year; this is a 44 per cent increase over plantings of the preceding year.

Lake Trout:

The collection of lake trout eggs in the fall of 1943 was 20 per cent lower than that of the fall of 1942. This was reflected in the distribution in 1944 which was 21 per cent lower than that of 1943. In addition to this distribution, 44,000 yearling lake trout were planted.

Steps are being taken by the Department to ascertain the factors responsible for the decline, with a view to providing a remedy.

Atlantic Salmon:

"Nearly 30,000 salmon of Miramichi stock obtained from the Dominion Department of Fisheries, hatched at Glenora, and fed at the Waring Creek Rearing Station for about 34 days, were planted on June 20, 21 and 22, 1944, in Duffin Creek above Pickering by the Ontario Department of Game and Fisheries with the co-

operation of members of the staff of the Ontario Fisheries Research Laboratory. The plan followed was based upon the experience of the Fisheries Research Board on the Petittcodiac River, N B., and involved distributing the fish along the streams of the system in numbers related to estimated holding capacity for yearlings. A total of 54,890 yards were planted. Neither the large, lowest waters nor for the most part the small uppermost waters were included, but the distribution covered a large part of the two main branches of the system and their tributary streams.

Hand-seinings (one man) made by myself in July, August and September, and by Dr. Huntsman in October, by which time the fish were from 5.7 cm. (2.2 in.) long in the coldest water to 11 cm. (4.3 in.) in the better waters, showed that some salmon survived in all the tributaries and in the upper parts of the two main streams, but in only two places were they found elsewhere. Most were in cool clear waters with constant, moderate flow, which were apt to be noted for trout. Some correlation is seen between disappearance of salmon (from the main stream) and heavy floods with very much sediment, which alter the stream bed, forcing the fish to shift their locations, and reducing the available food supply. Also salmon survival seems correlated with few minnows and rainbow darters. The salmon were found as a rule in from 6 to 12 inches of water, at somewhat intermediate temperatures, over clean, coarse gravel, or in relation to such cover as stones, boulders, etc. and in partial shade rather than dense woods or open to full sky. By mid-October, from none to nearly a third of the number planted were found in various parts of the streams examined, but the proportion of those present that would be caught in the seining was unknown." (D. M. Britton).

Whitefish:

The distribution of whitefish was 30 per cent less than that of the preceding year.

The collection of whitefish eggs in the fall of 1943 was 23 per cent less than the collection in 1942. This decrease was noticeable on all the spawning areas where collections were made. Likewise the distribution of whitefish in 1944 was 30 per cent less than that of 1943.

Herring:

The total collection of herring spawn and the percentage fertility of the eggs taken varies considerably from year to year. It is probable, although there is no documented evidence that can be cited as proof, that in both cases weather conditions may be largely responsible.

The collection made in the fall of 1943 was somewhat smaller than that of 1942, and the loss due to infertility was very much higher. Consequently, the distribution in 1944 was considerably less than that of 1943.

Yellow Pickerel:

The number of yellow pickerel eyed eggs and fry planted this year was substantially the same as last year, namely, a 2.8 per cent increase in 1944 over that of 1943.

Small-mouth Black Bass:

The number of small-mouth black bass fry planted was greatly in excess of that of the preceding year, namely a 300 per cent increase. The production of

fingerlings was increased by 69 per cent. There was also a substantial increase in the number of yearling and adult bass planted.

Large-mouth Black Bass:

As formerly, one pond was operated for the propagation of large-mouth black bass; the production being 130,000 fry and 14,600 fingerlings.

Perch:

The production of perch fry was approximately the same as that of the preceding year.

Maskinonge:

The distribution of maskinonge fry and fingerlings was 130 per cent and 37 per cent higher, respectively, than in 1943.

CLOSED WATERS

In addition to the waters already closed for the natural protection and propagation of fish the following were closed during the period April 1, 1944 and March 31, 1945.

ADAM LAKE

Located in unorganized territory north of Clay Lake, and between Fluke Lake and Segise Lake, District of Kenora.

BENORIS LAKE

Located on Lot 25, Concessions 8, 9 and 10, Township of Harcourt, District of Haliburton.

FISHTAIL LAKE

Located on Lots 10 and 15, Concessions 8 and 9, Township of Harcourt, District of Haliburton.

HARVEY or NOGIES CREEK (Part)

Located on Lot 10, Concession 2, Township of Galway and Lot 28, Concession 17, Township of Harvey, County of Peterborough.

KINGSCOTE LAKE

Located in the Township of Harcourt, District of Haliburton.

MASKINONGE CREEK flowing from Maskinonge Lake; Little Vermillion Lake, (Part) and Maskinonge Lake (Part)

Located on Lot 12, Concession 5, and Lot 8, Concession 6, respectively, Township of Pickerel, District of Kenora.

McMILLAN CREEK

Located on Lot 33, Concession 6; Lot 34, Concession 6; Lot 25, Concession 6, Township of McKillop, Lot 1, Concession 6; Lot 2, Concession 6; Lots 2, 3, 4, 5, 6, 7, Concession 5, and Lot 7, Concession 4, Township of Hullett, County of Huron.

NASH'S CREEK or HOASIE'S CREEK

Located on Lots 26 and 27, Concession 1, Township of Williamsburg,

County of Dundas.

SILVER CREEK

Located on Lot 22, Concession 2; Lot 21, Concession 2; W.H. Lot 21, Concession 1, Lot 22, Concession 1, Lot 23, Concession 1, Township of McKillop, and Lot 9, Concession 1, Township of Tuckersmith, County of Huron.

Part of Little Thessalon or Bridgland River located between what is known as **RESERVE DAM** and **McCREIGHT'S DAM**, both in Township of Kirkwood, Algoma District.

BIOLOGICAL SURVEYS

Biological surveys were conducted on —
Twelve Mile Creek, Lincoln County;
Welland River and Canal, Welland County;
Walker's Pond, Middlesex County, and
Belwood Lake, Wellington County.

The Grand River was examined near Dunnville regarding the need for fish-ways in order that pickerel might have access to the reaches of the river above the dams at Dunnville.

Streams in the vicinity of Caledon were studied as to their possibilities as hatchery sites.

The following waters were examined for evidence of pollution and for other causes of fish mortality.

1. River between Sturgeon Lake and Pigeon Lake at Bobcaygeon. Pollution by domestic sewage evident, but it had no noticeable effect on fish life.
2. Beardmore Creek at Acton — Tannery wastes.
3. Duffin's Creek near Pickering — Treated domestic sewage.
4. Sandy Lake, Peterborough County — Some fish mortality but the cause was not determined.
5. Grand River near Kitchener — Domestic and trade wastes.
6. Nith River near New Hamburg — Domestic Sewage.
7. Lake Ontario off Peel and Halton Counties — Persistent oil slick on the water in this area.

The Ontario Fisheries Research Laboratory of the Department of Zoology, University of Toronto continued the studies of fisheries in the Provincial parks and other waters of the Province. Financial assistance and cooperation making this work possible was received from the Ontario Department of Game and Fisheries, the National Committee on Fish Culture, the University of Toronto, and for work with in the parks, the Ontario Department of Lands and Forests.

STOCKING, LAKE CLOSURE and CREEL CENSUS

The experimental stocking of selected lakes in Algonquin Park and the practice of alternate annual closure of Lakes were continued as in previous years as experiments in fish culture directed toward building up a good stock of both lake trout and speckled trout. The creel census was carried out in order to determine the efficacy of these two procedures.

Biological studies have been initiated in Lake Superior Provincial Park, Sibley Provincial Park and Quetico Provincial Park, in all of which the creel census has been used as a means of determining the present availability of stock of game fishes. More intensive biological studies have been carried out on the lakes and streams of both Quetico and Sibley Parks as a basis for a management policy to improve the game fishery.

Meetings of the Ontario and New York State fisheries biologists were held on two occasions during the year at Kingston, Ontario, for the purpose of planning studies on lake Ontario. Arising out of these conferences investigations of the plankton production, small-mouth black bass and whitefish were undertaken. The bass of the upper St. Lawrence river and adjacent Ontario waters were tagged in order to determine their movements throughout the year.

A special study of the whitefish was carried out to compare the effectiveness of natural reproduction with that of hatchery produced fry. In order to accomplish this, the hatchery raised fry are to be planted in alternate years and an analysis of the year class composition of fish in the commercial catch is to be carried out continuously so that the year class of whitefish arising from natural spawning only, and natural spawning supplemented by hatcheries may be measured.

In conjunction with this investigation the Ontario Department of Game and Fisheries have greatly improved the method of collecting statistics of catch from the commercial fishermen which constitutes an essential adjunct to the successful implementation of this research.

In view of the fact that the Atlantic salmon were formerly abundant in Lake Ontario and tributary streams where they are now completely lacking, an investigation has been undertaken in cooperation with the Ontario and Federal Departments of Fisheries to determine whether or not it may be possible to introduce this valuable species. This investigation includes, also, an analysis of the distribution of planted salmon fry and fingerlings along the course of Duffin Creek where the experiment is being carried out to determine conditions within the stream favourable or unfavourable for the planted fry.

The techniques and results of this study may be of the greatest importance as having a direct bearing upon the general practice of planting fry and fingerlings of any species in the waters of the Province.

Closely integrated with this investigation, studies are being made on the effect which sedimentation in the stream has upon invertebrate life constituting the food of the fishes living there.

ACKNOWLEDGEMENTS

In conclusion I desire to express general satisfaction with the services rendered by the various members of the Departmental staff, both in the Main Office and in the Field. They performed their duties in a conscientious manner, and were generally courteous in their contacts with the public with whom they had any dealing.

Local Fish and Game Protective Associations and the Northern Ontario Tourist Trade Association, as well as their various officers, have cooperated with the Department in our efforts to secure strict observance of the legislation provided for the protection of fish and game in the Province and in our work to further extend and develop conditions favourable to the possible improvement of the wild-life division of our natural resources, and it would be extremely difficult to estimate the value of the results of this co-operation. It is superfluous to add that this assistance has somewhat relieved the burdens of administration and it is very deeply appreciated.

Many other organizations and individuals have assisted with desirable advice and suggestions, and the efforts put forth by Municipal Councils and Controlling Organizations in the Townships included in the scheme of Regulated Game Preserve Areas have been of considerable advantage and benefit in bringing to this scheme the success it at present enjoys.

All of which is respectfully submitted.

I am, Sir,

Your obedient servant,

D. J. Taylor
Deputy Minister of Game and Fisheries

APPENDIX NO. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1, 1944, to March 31, 1945.

LARGE-MOUTHED BLACK BASS		Dundas	10,000
FRY		Frontenac	41,000
Bruce	20,000	Grenville	7,000
Muskoka	10,000	Grey	16,000
Nipissing	20,000	Haliburton	15,000
Parry Sound	15,000	Hastings	65,000
Victoria	50,000	Huron	2,000
Waterloo	10,000	Kent	10,000
Wellington	5,000	Lambton	10,000
FINGERLINGS		Lanark	10,000
Brant	1,500	Leeds	63,000
Lincoln	5,000	Lennox	19,000
Middlesex	1,000	Lincoln	5,000
Oxford	500	Manitoulin	85,300
Perth	1,600	Muskoka	3,300
Welland	5,000	Nipissing	10,100
YEARLINGS AND ADULTS		Northumberland	11,500
Oxford	51	Oxford	5,000
SMALL-MOUTHED BLACK BASS		Parry Sound	17,100
FRY		Peel	2,000
Algoma	35,000	Peterborough	13,600
Bruce	110,000	Prince Edward	15,000
Elgin	30,000	Renfrew	7,000
Frontenac	6,000	Russell	1,000
Grey	10,000	Simcoe	13,000
Halton	40,000	Stormont	10,000
Hastings	15,000	Sudbury	32,400
Huron	10,000	Temiskaming	3,000
Lanark	14,000	Thunder Bay	52,000
Manitoulin	185,000	Victoria	8,500
Muskoka	175,000	Welland	5,000
Nipissing	180,000	Wellington	8,000
Ontario	10,000	York	20,000
Parry Sound	450,000	YEARLINGS AND ADULTS	
Peterborough	65,000	Brant	172
Simcoe	10,000	Haliburton	250
Sudbury	505,000	Hastings	460
Victoria	90,000	Manitoulin	476
Waterloo	60,000	Norfolk	100
Wellington	30,000	Northumberland	20
FINGERLINGS		Parry Sound	384
Algoma	59,500	Perth	100
Brant	5,400	Peterborough	872
Carleton	2,500	MASKINONGE	
Cochrane	1,200	FRY	
		Dundas	15,000
		Grenville	20,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1, 1944, to March 31, 1945

FRY (Continued)

Hastings	320,000	Nipissing	6,400,000
Leeds	10,000	Northumberland	3,800,000
Lennox-Addington	20,000	Ontario	200,000
Nipissing	45,000	Parry Sound	17,750,000
Muskoka	20,000	Peterborough	9,400,000
Northumberland	160,000	Prince Edward	800,000
Ontario	10,000	Simcoe	2,000,000
Parry Sound	20,000	Stormont	700,000
Peterborough	1,260,000	Sudbury	5,200,000
Prince Edward	80,000	Temiskaming	3,150,000
Renfrew	10,000	Thunder Bay	1,000,000
Simcoe	25,000	Victoria	3,800,000
Stormont	20,000	Welland	300,000
Sudbury	40,000	York	750,000
Victoria	630,000	Great Lakes	23,000,000

FRY

Algoma	1,950,000
Bruce	350,000
Cochrane	3,075,000
Kenora	70,350,000
Lanark	300,000
Lennox & Addington	7,000,000
Manitoulin	4,250,000
Muskoka	1,275,000
Nipissing	1,050,000
Parry Sound	4,250,000
Prince Edward	5,140,000
Rainy River	21,500,000
Renfrew	9,150,000
Simcoe	200,000
Sudbury	8,650,000
Temiskaming	2,175,000
Thunder Bay	4,750,000
Great Lakes	11,900,000

FINGERLINGS

Hastings	400
Nipissing	300
Peterborough	1,640
Victoria	612

MINNOWS

Muskoka	25,000
---------------	--------

PERCH

Lake Erie	17,980,000
Lake St. Clair (Mitchell's Bay)	500,000

PICKEREL**EGGS**

Algoma	16,275,000
Bruce	1,400,000
Dundas	450,000
Frontenac	2,650,000
Grenville	500,000
Hastings	1,350,000
Kent	500,000
Lambton	1,050,000
Lanark	1,850,000
Leeds	1,850,000
Lennox-Addington	850,000
Lincoln	150,000
Middlesex	250,000
Muskoka	6,575,000

ATLANTIC SALMON**FRY**

Ontario	30,000
---------------	--------

BROWN TROUT**YEARLINGS**

Brant	18,200
Bruce	25,800
Cochrane	700
Durham	11,000
Elgin	9,600
Grey	70,400
Haldimand	2,000
Halton	19,700

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1, 1944, to March 31, 1945

YEARLINGS (Continued)

Hastings	9,800
Huron	13,400
Middlesex	3,000
Muskoka	1,200
Norfolk	29,200
Northumberland	6,050
Oxford	11,400
Parry Sound	4,000
Peel	18,600
Perth	4,800
Peterborough	11,100
Renfrew	4,200
Simcoe	16,300
Waterloo	10,800
Wellington	12,500
Welland	5,400
Wentworth	5,400
York	3,700
Miscellaneous, Sale (propagation purposes)	2,500

LAKE TROUT**EYED EGGS**

Exchange	200,000
----------------	---------

FRY

Haliburton	30,000
Muskoka	123,000
Nipissing	23,500
Parry Sound	240,000
Great Lakes	2,560,000

FINGERLINGS

Algoma	180,895
Bruce	5,000
Cochrane	17,000
Frontenac	66,000
Haliburton	127,500
Hastings	33,000
Kenora	122,900
Lanark	5,000
Leeds	17,000
Lennox - Addington	13,000
Manitoulin	30,000
Muskoka	136,000

Nipissing	71,400
Parry Sound	50,000
Peterborough	49,500
Rainy River	77,800
Renfrew	34,000
Sudbury	84,500
Thunder Bay	105,000
Temiskaming	20,500
York	5,000
Great Lakes	2,225,000

YEARLINGS

Algoma	22,478
Bruce	6,000
Nipissing	11,540
Simcoe	3,000
Temiskaming	1,000

RAINBOW TROUT**FINGERLINGS**

Algoma	18,186
Manitoulin	4,000
Sudbury	10,000
Dufferin	2,400
Elgin	500
Parry Sound	1,000

KAMLOOPS TROUT**YEARLINGS**

Muskoka	4,800
Parry Sound	2,400

SPECKLED TROUT**FINGERLINGS**

Algoma	1,500
Bruce	6,000
Cochrane	31,000
Dufferin	6,000
Grey	27,500
Huron	8,000
Nipissing	30,000
Thunder Bay	130,840
Temiskaming	249,000
Wellington	4,000

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS
April 1, 1944, to March 31, 1945

YEARLINGS			
Algoma	434,700	York	600
Bruce	28,300	Miscellaneous (Sale, Proagation Purposes)	9,400
Cochrane	122,700		
Dufferin	27,300	ADULTS	
Durham	24,900	Algoma	3,100
Elgin	7,500	Grey	160
Frontenac	37,700	Thunder Bay	600
Grey	107,400	Temiskaming	500
Haliburton	30,150		
Halton	3,600	WHITEFISH	
Hastings	121,350	EYED EGGS	
Huron	13,950	Exchange	400,000
Kenora	13,600	Kenora	1,000,000
Lanark	14,400	Thunder Bay	2,000,000
Lennox - Addington	46,500		
Lincoln	1,800	WHITEFISH	
Manitoulin	119,200	FRY	
Middlesex	1,835	Kenora	19,385,000
Muskoka	148,600	Manitoulin	500,000
Nipissing	211,200	Rainy River	13,600,000
Norfolk	24,800	Simcoe	1,000,000
Northumberland	47,850	Sudbury	500,000
Oxford	2,600	Great Lakes	221,050,000
Parry Sound	135,500		
Peel	13,713	HERRING	
Perth	600	FRY	
Peterborough	47,340	Great Lakes	
Renfrew	137,600	Lake Ontario	5,000,000
Simcoe	10,300	Lake Erie	202,000
Sudbury	439,550	Lake Huron	460,000
Thunder Bay	257,860		
Temiskaming	195,265		
Victoria	2,100		
Waterloo	13,500		
Wellington	21,700		

APPENDIX NO. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES - 1940 to 1944, INCLUSIVE

	1940	1941	1942	1943	1944
Large-mouthed Black Bass					
Fry	230,000	110,000	185,000	507,500	130,000
Fingerlings	5,500	17,700	19,100	38,500	14,600
Yearlings & Adults	152	109	290	290	51
Small-Mouth Black Bass					
Fry	2,512,500	1,911,500	1,535,500	1,512,000	2,030,000
Fingerlings	449,154	691,925	718,259	392,700	664,400
Yearlings & Adults	1,671	2,254	2,355	1,369	2,834
Maskinonge					
Fry	2,345,000	2,100,000	1,575,000	1,165,000	2,705,000
Fingerlings	2,333	1,494	705	2,150	2,952
Perch - Fry	13,000,000	31,600,000	24,175,000	19,000,000	18,480,000
Pickereel (Yellow)					
Eyed Eggs	2,000,000	4,500,000	17,250,000	26,950,000	113,950,000
Fry	393,887,000	223,490,000	284,510,000	236,925,000	157,315,000
Adults	100				
Pickereel (Blue)					
Fry				150,000	
Brown Trout					
Eyed Eggs				10,000	
Fingerlings	182,725	60,000	23,000	1,000	
Yearlings	252,000	346,188	359,275	303,335	330,750
Lake Trout					
Eyed Eggs	575,000	800,000	400,000	200,000	200,000
Fry	7,564,000	913,000	367,000	125,000	2,976,500
Fingerlings	7,312,100	18,066,400	15,429,600	8,048,800	3,475,995
Yearlings			10,680	60,860	44,018
Atlantic Salmon					
Fry					30,000
Fingerlings	46,385				
Rainbow Trout					
Fingerlings	298,420	164,000	111,000	73,242	32,186
Yearlings	19,724	11,750	12,900	15,450	3,900
Kamloops Trout					
Fingerlings		88,150			
Yearlings	26,500	25,000	24,800	5,000	7,200
Speckled Trout					
Fry			500	5,000	
Fingerlings	611,375	394,000	631,775	9,400	493,840
Yearlings	3,278,114	3,060,174	2,918,513	3,083,983	2,876,963
Adults	7,150	16,732	7,527	10,292	4,360
Whitefish					
Eyed Eggs			250,000	1,900,000	3,400,000
Fry	403,339,000	375,960,500	394,802,000	369,777,500	256,035,000
Herring					
Fry	49,050,000	8,630,000	18,430,000	24,560,000	5,662,000
Minnows			500		25,000
Totals	886,995,903	672,960,876	763,750,279	694,833,371	570,892,549



APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters

EQUIP

DISTRICT	No. Of Men	TUGS			GASOLINE LAUNCHES		SAIL AND ROW BOATS		GILL NETS	
		No.	Tons	Value \$	No.	Value \$	No.	Value \$	Yards	Value \$
Northern Inland Waters	872	5	32	19,500	245	102,240	303	19,158	688,322	89,294
Lake Superior	359	12	346	91,500	122	79,730	95	5,750	1,115,305	146,915
North Channel	80	2	20	5,500	35	19,550	34	1,865	182,288	15,455
Georgian Bay	426	12	279	92,950	139	135,610	124	6,707	1,322,586	162,600
Lake Huron	255	8	253	67,000	89	83,525	23	1,360	1,031,924	135,805
Lake St. Clair	79				35	16,050	52	3,645		
Lake Erie	925	49	725	343,700	171	281,550	127	10,235	2,605,012	397,470
Lake Ontario	622				219	130,790	189	8,171	1,220,600	137,630
Southern Inland Waters	191				16	3,650	110	5,085	3,600	1,250
Totals	3809	88	1655	620,150	1071	852,695	1057	61,976	8,169,637	1,086,419

APPENDIX

QUANTITIES OF

DISTRICT	HERRING	WHITE- FISH	TROUT	PIKE	PICKEREL (BLUE)	PICKEREL (DORE)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters	14,609	1,543,977	183,104	830,230	278	1,654,779
Lake Superior	1,480,605	402,701	1,552,693	6,503		95,973
North Channel	12,418	30,788	9,177	78,037		61,999
Georgian Bay	55,086	364,368	815,153	29,579	475	55,946
Lake Huron	129,462	142,455	315,828	800	80	154,480
Lake St. Clair		80		11,679		52,533
Lake Erie	335,596	1,258,912	110	42,734	9,389,808	775,589
Lake Ontario	1,018,107	460,882	74,365	73,226	22,628	48,147
Southern Inland Waters						
TOTALS	3,045,883	4,204,163	2,950,430	1,073,388	9,413,269	2,899,446
VALUES	\$308,824.46	1,202,152.67	745,294.57	87,970.43	848,151.26	491,571.29

NO. 3

DEPARTMENT, ONTARIO

of Ontario, for the year ending December 31st, 1944

MENT

SEINE NETS			Pound Nets		HOOP NETS		DIP AND Roll Nets		NIGHT LINES		SPEARS		Freezers & Ice Houses		Piers and Wharves		TOTAL
No.	Yards	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	No.	Value \$	VALUE \$
			34	14,960	72	2,580	2	4	4,800	390			141	35,720	121	15,595	299,441
			46	19,570									67	33,295	60	15,525	392,285
			30	12,500									20	7,350	18	7,100	69,320
3	500	500	66	66,800	48	850	1	1	14,400	2,385			63	19,550	53	34,286	522,239
1	100	75	89	61,200					3,600	700			55	29,050	17	5,795	384,510
11	3,500	2,675	98	13,080			1	2	3,900	345			15	5,175	10	1,875	42,847
41	9,690	7,360	541	283,200	22	460	6	30	1,650	105			106	194,150	90	38,810	1,557,070
10	955	1,225			710	23,407	12	2,352	3,550	143			40	11,395	39	9,270	324,383
40	3,705	6,825			285	9,715	19	100	1,500	55			14	1,980	1	50	28,710
106	18,450	18,660	904	471,310	1137	37,012	41	2,489	33,400	4,123			521	337,665	409	128,306	3,620,805

NO. 4

FISH TAKEN

STURGEON	EELS	PERCH	TUL- IBEE	CATFISH	CARP	MIXED COARSE	CAVIARE	TOTAL	VALUE
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	\$ c
118,982		10,398	169,834	52,551		383,709	1,070	4,964,121	744,286.12
913		1,501	53,296			166,864		3,761,049	530,165.43
6,066		23,136	7,314	326	2,378	255,236	31	486,906	56,063.68
988		2,793	110,347	3,420	19,226	87,552	9	1,544,942	380,384.29
4,512		316,699	257,803	13,494	18,168	106,357	72	1,460,210	272,371.39
4,177		39,008		63,511	93,153	184,791	179	449,111	48,262.19
14,895		1,372,905		82,577	191,223	1,791,081	231	15,255,661	1,891,243.02
10,584	39,762	167,257		179,231	215,786	326,474	68	2,636,517	425,206.02
	2,033	8,511		111,667	134,074	225,757		482,042	41,291.20
161,117	41,795	1,942,208	598,594	506,777	674,008	3,527,821	1690	31,040,559	
87,272.04	3,700.56	197,362.82	95,189.16	74,900.04	45,790.85	198,287.23	2,805.96		4,389,273.34

APPENDIX NO. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES
OF ONTARIO

KIND	1943 POUNDS	1944 POUNDS	Increase POUNDS	Decrease POUNDS
Herring	2,754,233	3,045,883	291,650	
Whitefish	4,186,031	4,204,163	18,132	
Trout	3,237,130	2,950,430		286,700
Pike	1,139,862	1,073,388		66,474
Pickrel (Blue)	9,660,949	9,413,269		247,680
Pickrel (Dore)	2,512,033	2,899,446	387,413	
Sturgeon	134,936	161,117	26,181	
Eels	36,930	41,795	4,865	
Perch	1,346,136	1,942,208	596,072	
Tullibee	609,386	598,594		10,792
Catfish	425,129	506,777	81,648	
Carp	756,066	674,008		82,058
Mixed and Coarse	3,794,744	3,527,821		266,923
Cavaire	1,772	1,660		112
	30,595,337	31,040,559	1,405,961	960,739
Net Increase			445,222	

Thirty-Ninth Annual Report
OF THE
Department
of
Game and Fisheries
1945 - 1946

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL NO. 41, 1948



TORONTO

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Excellent Majesty

1948

TO HIS HONOUR,

The Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned begs respectfully to present to Your Honour, the Thirty-Ninth Annual Report of the Department of Game and Fisheries for the year ending March 31, 1946.

H. R. SCOTT,
Minister.

THIRTY-NINTH ANNUAL REPORT
OF THE
Department of Game and Fisheries

Following is the Thirty-ninth Annual Report of the Department of Game and Fisheries, in which is included data and information concerning administration of the services assigned to this Department, together with various statistics for the fiscal year ended March 31st, 1946, comparative tables and other information relative to our operations which may prove interesting and of value to those concerned.

PREAMBLE

During the twelve months under review, we witnessed the cessation of those hostilities the prosecution of which to a successful termination had been the first and foremost consideration of all of us over a period of practically six years. The resources of the nation were fully utilized and proved their effectiveness in war. They have a peace-time value which, if properly appraised and used efficiently, will secure for the nation an economic future rich in material values, and worthy of the sacrifices which have been made.

In this scheme of reconstruction and re-appraisal, the Fish and Wildlife component of our natural resources will assume a new value, as they constitute an important item in our total economy. As a recreational medium they have a value which in a great measure surpasses their material worth. Fishing and hunting are sports of the masses as well as the classes, and as an asset to national health they occupy a ranking position.

Characteristic of our way of life is our love of the out-of-doors. The recreational possibilities of forest and field and lake and stream are an inspiration and invitation to a freer and fuller life, while the character building influence of the outdoor environment is an important factor in the development of good citizenship.

The men who fought to protect this heritage and make it secure for posterity have, by their courage and valour, firmly established the great outdoors as a memorial to themselves. It is symbolic of peace and the finer things of life. Let us resolve to maintain it as such, remembering always that our freedom to enjoy it has been re-established at a heavy cost.

FINANCIAL

The financial operations of the Department during the fiscal year under review are detailed in the presentation which follows.

The various sources of revenue and the receipts derived therefrom, as well as the expenditures involved in the provision of services, are outlined in the following statement.

Careful scrutiny of these tables and the subsequent reference thereto will indicate a very noticeable expansion of the interest which is now being displayed by sportsmen in the beneficial recreation which emanates from participation in the twin sports of angling and hunting which are available in the Province of Ontario.

REVENUE FOR THE FISCAL YEAR ENDING MARCH 31st, 1946

GAME—

Licences—

Trapping	\$ 54,584.15
Non-resident Hunting	218,855.00
Deer	166,635.20
Moose	7,051.00
Gun	110,252.51
Dog	9,512.70
Fur Dealers	36,914.00
Fur Farmers	7,189.00
Tanners	160.00
Cold Storage	246.00

\$611,399.56

Royalty on Furs	223,183 95
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\$834,583.51

FISHERIES—

Licences—

Fishing (Commercial)	\$ 90,541.00
Angling	605,320.60

\$695,861.60

Royalty on Commercial Fish	12,563.97
----------------------------------	-----------

\$708,425.57

GENERAL—

Licences—

Tourist Camps	\$ 8,435.00
Guides	9,062.00
Fines (Enforcement of Act)	34,398.54
Costs Collected (Enforcement of Act)	810.12
Sales, Confiscated Articles	49,186.62
Rent	3,103.50
Commission retained by Province on sale of licences	2,773.76
Miscellaneous	387.04

\$108,156.58

\$1,651,165.66

The amount of total revenue derived during the year, viz:—\$1,651,165.66, was far in excess of the total receipts collected in any previous year. This total represents an increase of \$458,131.94 over the amount accruing from our operation during the previous fiscal year, ending March 31st, 1945, or an increase of practically forty per cent. The largest contribution to this important increase is attributable to the greater revenue derived from the sale of non-resident licences, both hunting and angling, which in the year under review amounted to \$824,175.60 or practically fifty per cent of our total revenue for this fiscal year, and which exceeded, by the sum of \$296,512.30 the revenue which was secured from the sale of these non-resident licences in the preceding year.

The following are additional comments and comparisons with reference to other sources of revenue to which important portions of this increase can be assigned, viz:—

From the sale of various types of resident hunting licences we received during 1945-46 a total of \$293,451.41, an increase of \$84,420.92 as compared with the revenue derived from this source in 1944-45.

In 1945-46 we collected a total of \$314,682.10 from the sale of trappers' licences and fur dealers' licences and including royalties payable on the pelts of fur-bearing animals taken in the Province, an increase over the revenue collected from similar sources in 1944-45 of \$36,467.80.

The operations of the Enforcement Service were responsible for the collection in 1945-46 of the sum of \$84,395.28 from penalties imposed and the sale of confiscated articles which resulted from the apprehension, prosecution and conviction of offenders, which amount was \$32,407.30 in excess of the revenue derived from these sources in the preceding year.

The following comparative table which outlines details of the various types of hunting and angling licences which were sold in the two years 1944-45 and 1945-46 may be of interest:

NON-RESIDENT HUNTING LICENCES

	1944-45	1945-46
Small Game	1,949	3,281
Deer	2,385	4,430
General	653	1,426
Bear (Spring Season)	181	314

RESIDENT HUNTING LICENCES

Deer	31,470	45,259
Deer (Camp)	398	481
Deer (Farmers')	6,786	8,190
Moose	875	1,282
Resident Hunting (Gun)	92,847	131,468

NON-RESIDENT ANGLING LICENCES

Individual (Seasonal)	36,907	57,877
Individual (Three-Day)	32,242	33,261
Family	18,859	33,415
Manitoba Resident	817	1,031
Boys' Camp	18	33

The total number of these licences issued in 1945-46 was 321,748 of which number 135,068 were secured by non-resident hunters and anglers who visited Ontario to participate in the pastime and recreation thus available.

Expenditures during the year, including both ordinary and capital, amounted to a grand total of \$748,661.36, which exceeded by \$109,896.09 the amount expended in the previous year. The major proportion of this additional expenditure, \$83,736.45, was accounted for by increased appropriations provided for the Biological and Fish Culture Service and for the Enforcement Service.

Details of the various services on which these expenditures were made are specified in the following table:

EXPENDITURE FOR THE FISCAL YEAR ENDING MARCH 31st, 1946

ORDINARY—

Main Office	\$ 59,908.70
General	49,429.94
Enforcement	298,895.84
Game Animals and Birds	21,002.27
Macdiarmid	3,245.94
Biological and Fish Culture	246,196.50
Grants	5,400.00
Wolf Bounty	44,999.87
Bear Bounty	11,348.00

Total Ordinary\$740,427.06

CAPITAL 8,234.30

Grand Total\$748,661.36

The amount provided for grants, \$5,400.00, was distributed as follows:

- (a) \$2,500.00 to the Ontario Fur Breeders' Association, Inc., to assist their efforts towards the improvement of Fur Farming practice throughout the Province;
- (b) \$500.00 for expenditure in connection with the work of Fisheries Research under the supervision of Professor W. J. K. Harkness;
- (c) \$500.00 to the Ontario Federation of Anglers and Hunters for expenditure in connection with the educational programme of the Federation regarding the importance of compliance by sportsmen with the provisions of the legislative enactments or Regulations which are administered by the Department; and,
- (d) \$1,500.00 to the estate of the late Jack Miner; \$300.00 to Mr. Thomas N. Jones; and \$100.00 to Miss Edith L. Marsh, in appreciation of their services in providing sanctuary for migratory and native birds on their properties located respectively in the Counties of Essex, Elgin and Grey.

The table next following shows revenue, expenditures and the surplus accruing from our operations annually over a period of the past ten years:

	REVENUE	EXPENDITURE (Ordinary and Capital)	SURPLUS
1936-37	\$ 782,217.63	\$474,128.95	\$318,088.68
1937-38	866,558.19	563,938.33	302,619.86
1938-39	914,475.24	575,437.79	339,037.45
1939-40	1,015,350.82	568,198.55	447,152.27
1940-41	984,800.69	512,834.70	471,965.99
1941-42	1,183,269.29	576,762.26	606,507.03
1942-43	962,350.89	574,732.49	387,618.40
1943-44	975,072.60	574,525.05	400,547.55
1944-45	1,193,033.72	638,765.27	554,268.45
1945-46	1,651,165.66	748,661.36	902,504.30

It will be observed that the surplus of revenue over expenditures in 1945-46, viz:—\$902,504.30, was far greater than that in any year during this particular period, and it was never exceeded in any year previous thereto.

GAME

The comments included in the following summary of conditions applicable to game birds and animals insofar as they relate to white-tailed deer, moose, caribou, black bear and partridge are generalizations on the status of these respective species based on the results of a questionnaire distributed by the Royal Ontario Museum of Zoology:

WHITE-TAILED DEER:—There are now no areas in Ontario south of Patricia district where deer are not found. Our principal deer country is still a broad belt from Sault Ste. Marie to Arnprior with an important extension west of Lake Superior. Northward deer are scarce. The hunting pressure on deer is constantly increasing.

MOOSE:—Moose are scarce or decreasing in several important portions of their Ontario range, but there still remain areas of abundance. The trend, downward, especially west of Lake Superior, is causing some concern. Algonquin Park remains the centre of moose abundance south of the French and Mattawa Rivers. Northward, moose are scattered throughout the country. The Lake Superior, Lake Nipigon and Albany River regions are centres of abundance.

CARIBOU:—The caribou is scarce in those parts of the Province where it still remains, but has not lost ground recently.

ELK:—Animals of this species which exist in Ontario at this time are the results of experiments to re-establish elk in Ontario undertaken by the Department in the years immediately preceding the period covered by this report. They are to be found only in the areas which have been re-stocked and there only in limited numbers. These re-stocked areas include portions of the Counties of Bruce, Simcoe and Peterborough, as well as the districts of Algoma, Nipissing, Sudbury and Thunder Bay. Improvement in conditions applicable thereto is not very noticeable. The hunting of elk is prohibited under the provisions of the Game and Fisheries Act throughout the entire year.

BLACK BEAR:—Black bear have increased to a remarkable extent and are usually abundant throughout the Province except in the densely settled portion.

RABBITS:—The prevalence of rabbits provides sportsmen throughout Ontario with a large percentage of the recreation they secure from hunting during the latter part of the fall season, and with practically all of the hunting which is available throughout the winter season. Three species of rabbits are to be found in this Province, viz:—

- (a) The cotton-tail rabbit, which is the source of enjoyable hunting throughout the southern counties;
- (b) European hare (or jack-rabbit). This species has a general distribution throughout the southwestern part of the Province and in some of the eastern counties.
- (c) Snow-shoe rabbit. Reports received in the Department would warrant the assumption that this species is fairly plentiful in the northern portion of the Province and in addition in some of the northern and eastern sections of southern Ontario.

While there are some areas from which decreased numbers are reported, generally speaking, conditions with reference to the species throughout continued to be quite favourable.

PARTRIDGE:—Three species of native partridge are well distributed in settled portions of Ontario, viz:—spruce grouse, ruffed grouse and sharp-tailed grouse. Conditions of abundance of these game birds are briefly as follows:

SPRUCE GROUSE:—Spruce grouse are present but scarce throughout the coniferous forest of northern Ontario.

RUFFED GROUSE:—Except in a few localities where recovery has already commenced, the Ontario grouse population is at the lowest point of its natural periodic cycle. The population is repeating exactly the pattern of ten years ago, and there is no reason to doubt that recovery will follow in due course.

SHARP-TAILED GROUSE:—Sharp-tailed grouse, found in northern and western Ontario, are at a low ebb in their cycle of numbers. A small number of this species has become established in the area east of Sault Ste. Marie.

HUNGARIAN PARTRIDGE:—This species is not native to Ontario. Their existence in the Province has resulted from the planting in certain sections of birds imported into the Province. They are to be found principally in the southwestern counties of Essex and Kent, and in the Counties of Dundas, Russell and Stormont in southeastern Ontario.

PHEASANTS:—During the past ten years efforts to re-stock this species in suitable portions of the Province have varied from the practice which was prevalent earlier. Previously it had been the policy to supply settings of eggs from the Bird Farm operated by the Department to those who were sufficiently interested in the work to hatch the eggs, raise the product thereof, and release the birds in localities in which environment suitable to the welfare of the birds prevailed. Today and for the past few years the Bird Farms have been operated under private control, and the poults produced have been obtained by the Department from the operators. The birds thus provided have been liberated under the supervision of Departmental officers principally in the townships established as Regulated Game Preserve Areas and in the Counties of Essex and Kent. Details of this distribution as carried out during the year now under review are in accordance with the following statistical table:

COUNTY	TOWNSHIP	POULTS	ADULTS		TOTAL
			HENS	COCKS	
Essex	General	1245			1245
Kent	General	1320			1320
Lambton	Plympton	210			210
Elgin	S. Dorchester	135			
	Bayham	165			
	Malahide	195			
	Dunwich	180			
	Aldborough	180			
	Total				855
Middlesex	General	30			
	Westminster	255			
	Metcalfe	90			
	Total				375
Norfolk	Middleton	165			
	N. Walsingham	135			
	Townsend	120	80	16	
	Windham	210			
	Total				726
Oxford	East Oxford	165	80	16	
	Dereham	210			
	Total				471

COUNTY	TOWNSHIP	POULTS	ADULTS		TOTAL
			HENS	COCKS	
Brant	Dumfries	165	80	16	
	Burford	180	80	16	
	Onondaga	165			
	Total				702
Wellington	Puslinch	120	85	17	
	Total				222
Haldimand	Dunn	135			
	Cayuga S.	105			
	Canboro	105			
	Walpole	225			
	Oneida	135			
	Rainham	105			
	Seneca	135			
	Cayuga N.	105			
	Moulton	150			
	Sherbrooke	90			
	Total				1290
Welland	Wainfleet	210			
	Humberstone	210			
	Crowland	210			
	Pelham	240			
	Thorold	270			
	Stamford	315			
	Bertie	170			
	Willoughby	255			
	Total				1880
Lincoln	Grimsby North	180			
	Grimsby South	180			
	Clinton	270			
	Caistor	150			
	Gainsboro	255			
	Louth	345			
	Grantham	300			
	Niagara	300			
	Total				1980
Halton	Trafalgar	405			
	Nelson	375			
	Esquesing	180			
	Nassagawaya	135			
	Total				1095
Wentworth	General	45			
	Ancaster	315			
	Barton	255			
	Saltfleet	270			
	Flamboro W.	150			
	Flamboro E.	105			
	Beverley	135			
	Binbrook	105			
	Glanford	105			
	Total				1485

Peel	Toronto	450			
	Chinguacousy	450			
	Albion	135			
	Caledon	135			
	Toronto Gore	120			
	Total				1290
York	Scarboro	255	95	19	
	Markham	330	95	35	
	Whitchurch	240	95	19	
	Vaughan	555			
	King	255			
	N. Gwillimbury	240			
	Total				2233
Ontario	Pickering	330	105	21	
	East Whitby	135			
	West Whitby	135			
	Total				726
Prince Edward	South Marysburg	90			
	Total				90
Durham	General	50			
	Total				50
Bird Dog Trials	Miscellaneous		50	50	
	York County	50			
	Middlesex County	100			
	Essex County	50			
	Welland County	50			
	Lincoln County	50			
	Total				400
MISCELLANEOUS					
(22 not released)		42			42
SUMMARY: Adults released..... 1,070					
Poults released..... 17,595					
Total released..... 18,665					

The Regulations which established the open season for pheasants in 1945 provided the following conditions, viz:—

Shooting was permitted between the hours of 8.00 a.m. and 5.00 p.m., on October 24th, 26th and 27th, in the following regulated townships:

Caistor, Clinton, Gainsboro, Grantham, Grimsby North, Grimsby South, Louth and Niagara in Lincoln County; and

Bertie, Crowland, Humberstone, Pelham, Stamford, Thorold, Wainfleet and Willoughby in Welland County.

Shooting was permitted between the hours of 8.00 a.m. and 5.00 p.m., on October 26th and 27th, in the following regulated townships:

Marysburgh South in Prince Edward County;
Pickering, Whitby and Whitby East in Ontario County;
Gwillimbury North, King, Markham, Scarborough, Vaughan and Whitchurch in York County;
Albion, Caledon, Chinguacousy, Toronto (part) and Toronto Gore in Peel County;
Esquesing, Nassagawaya, Nelson and Trafalgar in Halton County;
Puslinch in Wellington County;
Ancaster, Barton, Beverley, Binbrook, Flamboro East, Flamboro West, Glanford and Saltfleet in Wentworth County;
Canboro, Cayuga North, Cayuga South, Dunn, Moulton, Oneida, Rainham, Seneca, Sherbrooke and Walpole in Haldimand County;
Burford, Dumfries South and Onondaga in Brant County;
Middleton, Walsingham North and Windham in Norfolk County;
Dereham and Oxford East in Oxford County;
Bayham, Dorchester South and Dunwich in Elgin County;
Metcalf and Westminster (part) in Middlesex County; and
Plympton in Lambton County.

Shooting was permitted between the hours of 8.00 a.m. and 5.00 p.m. on October 27th, in the Township of Townsend in Norfolk County.

Hunters participating in the pheasant shoot provided in the townships enumerated above were required to provide themselves with the special licence issued by the respective township authorities in addition to the regular hunting licence demanded by the provisions of the Game and Fisheries Act; and the bag limit provided by the Regulations was three cock birds per day.

Shooting was permitted between the hours of 8.00 a.m. and 5.00 p.m. on November 1st, 2nd and 3rd in the Counties of Essex and Kent and the bag limit in this case was also three cock birds per day.

Shooting was permitted between the hours of 8.00 a.m. and 5.00 p.m. on November 1st and 2nd, on Pelee Island. Those hunting pheasants during this open season on Pelee Island were required to secure the special hunting licence issued by the Municipal authorities in addition to the hunting licence issued by the Department. The bag limit was five birds per day, not less than four of which were to be cocks. It was further provided for the protection of these birds that hunting and the discharge of fire arms would be prohibited on Pelee Island during the period from 5.00 p.m., October 24th, to 8.00 a.m., November 1st, or during the week previous to this open season for the taking of pheasants.

QUAIL:—Birds of this species are quite scarce, nor do reports indicate any improvement in conditions as they have existed in more recent years. They are limited, with some minor exceptions, to the Counties of Essex, Kent and Lambton. No provision was made for any open season in the fall of 1945.

DUCKS:—General conditions applicable to wild ducks were not altogether satisfactory and as a result there was some evident diminution of their numbers and decreased prevalence in certain areas throughout the Province in which, based on the experience of previous seasons, it may have been anticipated that more satisfactory hunting conditions might have prevailed. There were, of course, various sections in the southern portion of the Province in which quite favourable conditions for the successful hunting of wild ducks did prevail. Notwithstanding this apparent deterioration, the sport provided by the hunting of this variety of our migratory waterfowl population continued

to attract the attention of hunters who derived from their participation therein a substantial proportion of the pleasure and healthful recreation which accrues from the pursuit of game. The legislation which provides protection for waterfowl is a Federal Act, and the regulations which apply to govern this division of hunting are provided under the authority of this legislation, viz:—The Migratory Birds Convention Act, or "An Act Respecting a Certain Convention Between His Majesty and the United States of America for the Protection of Migratory Birds in Canada and the United States."

The Regulations which were then in effect provided an open season for the hunting of ducks in the fall of 1945 extending from September 15th to December 5th in the northern zone, and from September 25th to December 15th in the southern zone. The taking of eider ducks was allowed only in the territory lying north of the Quebec-Cochrane-Winnipeg line of the Canadian National Railway, during the period from September 15th to November 15th. The bag limits for ducks were 15 per day (increased from 12 per day in 1944) and 150 per season, with a new proviso to the effect that not more than one wood duck could be included in the daily bag limit.

GEESE:—There are but few sections in Ontario in which goose shooting is available, the principal of which are located along the shores of James Bay in the far north, and in the extreme southwestern portion of the Province, including the Counties of Essex, Kent and Elgin. As is the case concerning ducks they are protected under the provisions of the Migratory Birds Convention Act and the Regulations which are thereunder provided. The variety—Brant—is provided the protection of an entire close season, and specimens of this variety are observed very infrequently in Ontario.

The periods of open season were similar to those provided in the case of ducks, except in the Counties of Essex, Kent and Elgin in which section the open season extended from November 1st to January 10th. Bag limits were five per day and 50 per season.

WOODCOCK:—As a general rule this species is not plentiful, and it would appear from reports which have been received that their occurrence in numbers sufficient for hunting purposes is restricted to a few scattered areas.

In 1945 the open season provided by the Migratory Bird Regulations extended from October 1st to October 31st, with a bag limit of eight per day and 100 per season.

SNIFE:—This species is not plentiful. Areas in which satisfactory hunting conditions exist are scattered and restricted in extent.

The dividing line between the northern and southern zones is similar to that provided for ducks and geese. In the northern zone, the open season in 1945 extended from September 15th to November 15th, and in the south, from October 1st to November 30th.

Bag limits were eight per day and 50 for the season.

PLOVER:—Conditions are not favourable, and improvement is limited. Hunting of this species was not permitted at any time during the period under review. This complete protection, in accordance with the Migratory Birds Convention Act and Regulations, would appear to be essential if improvement is to be effected.

ADDITIONAL INFORMATION:—Regulations were promulgated to provide special open seasons in accordance with the following details:—

DEER:—

- (i) In those portions of Ontario lying south of the French and Mattawa Rivers and Lake Nipissing, as defined in clauses (dd) and (ddd) of Section 7 of The Game and Fisheries Act, the open season for deer in 1945 extended from November 5th to November 27th.
- (ii) In that portion of the County of Carleton lying west of the Rideau River there was an open season for deer in 1945 extending from November 5th to November 27th.

- (iii) In the Counties of Grey, Bruce and Huron there was an open season for deer in 1945 extending from November 19th to November 24th. The use of dogs for hunting deer during this open season in these counties was prohibited.
- (iv) At the request of the various Municipal Councils concerned, the hunting of deer was permitted in 1945 in certain townships in counties in which these animals are protected throughout the year in accordance with the provisions of clause (d) of Section 7 of the Game and Fisheries Act, as follows:

On November 27th, 28th, 29th and 30th, in the Townships of Ellice, Logan and North Easthope in Perth County; the Townships of Blandford and Blenheim in Oxford County; the Township of Wilmot in Waterloo County; and the Township of Moulton in Haldimand County.

On November 21st, 22nd, 23rd and 24th in the Townships of Esquesing, Nassagaweya and Nelson in Halton County; and the Township of Erin in Wellington County; and

On November 19th, 20th, 21st, 22nd, 23rd and 24th in the Townships of Matilda, Mountain and Williamsburg in Dundas County.

In connection with the hunting of deer in these several townships, it was stipulated that only shotguns, either buck-shot or S.S.G. shells as ammunition could be used; that the use of dogs was not permitted; that hunters could each take one deer, either buck or doe, over the age of one year; that special licences to be secured from the respective township clerks, were necessary; and that it was unlawful for hunters who had previously hunted deer in other parts of Ontario in 1945 to hunt deer in these townships.

MOOSE:—For the taking of moose in 1945 during the period from October 15th to October 31st in that portion of Ontario described in sub-clause (1) of clause (b) of Section 7 of The Game and Fisheries Act and in the following portion of the area defined in sub-clause (ii) of clause (b) of Section 7 of The Game and Fisheries Act, viz:

Bounded on the north by the main trans-continental line of the Canadian National Railway, commencing at McIntosh, thence easterly to Superior Junction; thence south-easterly from Superior Junction along the line of the Superior Junction-Fort William branch of the Canadian National Railway to Fort William; thence southwesterly from Fort William along the north shore of Lake Superior to the international boundary at the mouth of the Pigeon River, thence westerly along the international boundary from the mouth of the Pigeon River to the westerly boundary of the District of Thunder Bay, thence northerly along the westerly boundary of the District of Thunder Bay to the southerly boundary of the District of Kenora; thence westerly along the southerly boundary of the District of Kenora to the Base Line east of Britton Lake; thence northerly along the aforesaid Base Line to the First Base Line, thence westerly along the First Base Line to the easterly shore of Dryberry Lake, thence northerly along the easterly shore of Dryberry Lake and the easterly boundary of the Lake of the Woods Crown Game Preserve to Edison on the line of the C.P.R., thence northerly along the easterly shore of Cobble Lake to McIntosh, the point of commencement.

For the taking of moose in 1945 during the period from November 19th to November 27th in the Townships of Alice, Buchanan, Burns, Clara, Fraser, Head, Maria, McKay, Petawawa, Richards, Rolph and Wylie in Renfrew County.

PARTRIDGE:—For the taking of partridge in 1945 during the period from October 6th to 13th, with a bag limit of five birds per day and twenty birds for the season in that portion of Ontario lying north and east of and including the Counties of Huron, Wellington (excepting Puslinch Township), Dufferin, Simcoe and Ontario (excepting the Townships of Pickering, Whitby and Whitby East), and south of the French and Mattawa Rivers and Lake Nipissing (excepting the Counties of Renfrew, Carleton, Russell, and Prescott), and in that portion of Ontario lying north and west of the French and Mattawa Rivers and Lake Nipissing and east of the westerly boundary of the Districts of Algoma and Cochrane.

SQUIRRELS:—For the taking of black and grey squirrels in 1945, on November 16th and 17th, with a bag limit of five per day, in that portion of Ontario lying south of the French and Mattawa Rivers and Lake Nipissing.

FUR-BEARING ANIMALS

From information which was received in the Department from various sources the following summary has been prepared with reference to conditions respecting such species of fur bearers which are known to exist in the Province.

BEAVER:—Continued to be quite plentiful throughout a large percentage of the area within the borders of Ontario, though they are undoubtedly extremely scarce in many of the southern counties, due to an entire lack of suitable environment for the development of this species. Due to the satisfactory conditions which prevailed it was considered necessary and desirable to provide an open season for the trapping of beaver during 1945, from December 1st to December 21st, in that portion of Ontario described as follows, viz:—

Lying north and west of the French and Mattawa Rivers and Lake Nipissing,—

EXCEPT the District of Rainy River and that portion of the District of Kenora lying south of the main line of the Canadian National Railway running east from the Manitoba boundary to Superior Junction, and west of the line of the Canadian National Railway running southeasterly from Superior Junction to a point where it crosses the easterly boundary of the District of Kenora in the vicinity of Reba and the easterly boundary of the District of Kenora south from Reba to the boundary between the Districts of Kenora and Rainy River,

and in the Districts of Manitoulin and Parry Sound and that portion of the District of Nipissing lying south of the Mattawa River, and the Counties of Frontenac, Lanark and Renfrew and those portions of the Counties of Hastings and Lennox and Addington lying north of Highway No. 7.

Trappers were each allowed to take not more than ten beaver during this open season, and from returns submitted by trappers and fur-dealers, information has been compiled from which it is observed that the total catch exceeded by practically 4,500 pelts the total of such pelts which accrued from trapping operations during the previous open season, in 1944.

In addition to this general open season, a special open season for the taking of beaver in 1945 was provided effective in the Townships of Sullivan and Bentinck in Grey County, during the period from November 18th to December 1st. In this particular instance trapping was restricted to trappers and farmers resident in the area. Each individual so trapping was restricted to a catch of not more than ten beaver, and the pelts so taken were required to be delivered to the Department for ultimate disposal on behalf of the persons submitting the same.

On reference to a subsequent table, it will be noted that some 42,553 beaver were taken in Ontario during these periods of open season, and it has been estimated that these pelts were worth \$2,160,841.34 to the trappers concerned, which is thirty per cent of the total value of the entire fur catch during the year covered by this report.

FISHER:—While the total number of such pelts taken during the open season shows an increase of practically thirty per cent as compared with the catch of the previous season, it would be difficult to justify the assumption that such increase was attributable to any extensive improvement in conditions as they apply to this species. Their numbers are still extremely scarce and there are few sections in which they have been observed.

FOX:—These animals are sufficiently plentiful to be considered as a nuisance in many sections, particularly in southern Ontario. Their abundance is detrimental to the successful raising of domestic poultry, and is also a menace to the efforts of the Department for the establishment in suitable areas and the protection of the more

desirable species of game birds, to which we have been devoting a considerable portion of our time and energy.

While the value of fox pelts taken during the season showed a large decrease as compared with the price which was secured for fox pelts taken during the previous season, reference to the comparative table which appears later on in this report will show that the number of foxes taken in 1945-46 varies but slightly from the number taken in 1944-45.

LYNX:—This species continues to be extremely scarce. There has been no increase in the number taken and no improvement has been reported from any section. These animals are not protected by any closed season and they may be taken at any time during the trapping season.

MARTEN:—Here again, as in the case of fisher and lynx, we find a species which is quite scarce, and while the catch in 1945-46 exceeded that of 1944-45 by more than sixty per cent, it may be remarked that the total reported as having been taken, viz., 2,727, is quite meagre, and this increase should not be construed as an improvement to that extent.

MINK:—This species continues to be fairly plentiful and is available in many sections of the Province. The financial compensation derived by trappers from the sale of these pelts constitutes a considerable portion of their revenue. It has been computed from information which has been supplied to the Department that the value of mink pelts taken by trappers represented twenty-two per cent of the value of the entire fur catch resulting from trapping operations during the season which prevailed in the period reviewed in this report.

MUSKRAT:—Conditions applicable to muskrats continued to be favourable throughout most of the Province. There are, of course, areas in which environment suitable to the propagation and development of this species does not exist with the result that in these sections their numbers are very limited and trapping is, therefore, restricted. It has been estimated that at least thirty per cent of the total value of the entire fur catch of 1945-46 was attributable to the sale of muskrats.

The open season for the taking of muskrats is provided by Regulation, and while this open season, due to varying climatic conditions which require varying periods in different sections, generally speaking commences during the latter part of one fiscal year and finishes during the early part of the succeeding fiscal year, it may be desirable in accordance with the practice which was instituted in the previous Annual Report to record the open season which prevailed for muskrat, and details of the areas and periods of open season applicable thereto as provided in 1945 are appended hereto:

Period of Open Season

County or District	From	To
Brant	March 6th	March 30th
Bruce	March 17th	April 2nd
Carleton	March 17th	April 10th
Dufferin	March 6th	March 30th
Dundas	March 12th	April 5th
Durham	March 12th	April 5th
Elgin	March 6th	March 25th
Essex	March 5th	March 25th
(x) Frontenac (S)	March 12th	April 5th
(x) Frontenac (N)	March 17th	April 10th
Glengarry	March 12th	April 5th
Grenville	March 12th	April 5th

County or District	From	To
Grey	March 17th	April 2nd
Haldimand	March 6th	March 25th
Haliburton	March 21st	April 10th
Halton	March 6th	March 30th
(x) Hastings (S)	March 12th	April 5th
(x) Hastings (N)	March 17th	April 10th
Huron	March 6th	March 30th
Kent	March 5th	March 25th
(x) Lambton (S)	March 5th	March 30th
(x) Lambton (N)	March 6th	March 30th
Lanark	March 17th	April 10th
Leeds	March 12th	April 5th
(x) Lennox and Addington (S)	March 12th	April 5th
(x) Lennox and Addington (N)	March 17th	April 10th
Lincoln	March 6th	March 25th
Middlesex	March 6th	March 30th
Muskoka	March 21st	April 10th
(x) Nipissing (S)	March 21st	April 10th
Norfolk	March 6th	March 25th
Northumberland	March 12th	April 5th
(x) Ontario (S)	March 12th	April 5th
(x) Ontario (N)	March 17th	April 10th
Oxford	March 6th	March 30th
Parry Sound	March 21st	April 10th
Peel	March 6th	March 30th
Perth	March 6th	March 30th
(x) Peterborough (S)	March 12th	April 5th
(x) Peterborough (N)	March 17th	April 10th
Prescott	March 17th	April 10th
Prince Edward	March 12th	April 5th
Renfrew	March 21st	April 10th
Russell	March 17th	April 10th
(x) Simcoe (S)	March 6th	March 30th
(x) Simcoe (N)	March 17th	April 2nd
Stormont	March 12th	April 5th
(x) Victoria (S)	March 12th	April 5th
(x) Victoria (N)	March 17th	April 10th
Waterloo	March 6th	March 30th
Welland	March 6th	March 25th
Wellington	March 6th	March 30th
Wentworth	March 6th	March 30th
York	March 6th	March 30th
Algoma	March 30th	May 1st
Cochrane	March 30th	May 1st
Kenora	March 30th	May 21st
Manitoulin	March 30th	May 1st
(x) Nipissing (N)	March 30th	May 1st
Patricia	March 30th	May 21st
Rainy River	March 30th	May 21st
Sudbury	March 30th	May 1st
Timiskaming	March 30th	May 1st
Thunder Bay	March 30th	May 21st

- (x) The dividing lines between the north and south sections of these counties and districts for the purpose of this open season are respectively as follows, viz:—

Highway No. 7 in the counties of Frontenac, Hastings, Lambton, Lennox and Addington, Peterborough and Victoria;

The Mattawa River in the District of Nipissing;

The north boundary of the townships of Brock and Scott in the County of Ontario; and

The north boundary of the townships of Tossorontio, Essa and Innisfil in the county of Simcoe.

OTTER:—This species is practically extinct in all of the southern counties and in the remainder of the Province conditions are none too favourable. It is possibly correct to state that there are but few signs which justify any anticipation of general improvement in the immediate future. There was an increased number taken during the open season which was provided.

RACCOON:—These animals exist only in the southern portion of Ontario. Unfavourable climatic conditions which prevail during the winter months are not conducive to the existence and development of raccoon in Northern Ontario. The catch during the 1945 season was about the same as that of the 1944 season. The demand for these pelts for commercial purposes is limited with the result that trappers derive little financial benefit from this product.

SKUNK:—It is difficult to conceive that any reliable trapper would willingly assume to undertake the discomfort and inconvenience which must arise from the skinning of a skunk carcass and the preparation of the pelt for the market for the meagre pittance which he receives from the sale of such pelt. From the standpoint of public ease and comfort these animals still continue to be too plentiful in many sections of this Province.

WEASEL:—Conditions applicable to this species vary in different sections. There was a noticeable increase in the catch during the period under review. As compared with the catch of the previous year this increase was in excess of forty per cent. Pelt values and market conditions are not sufficiently favourable to encourage intensive trapping operations in respect to weasel.

GENERAL:—In addition to the open seasons which were provided by special recommendation, as have been previously related, with reference to beaver and muskrat, open seasons are established with respect to other fur-baring animals in accordance with legislation included in the Game and Fisheries Act, as follows, viz:—

For fisher, fox, marten, mink and otter—from November 1st to February 28th; and

For raccoon—from November 1st to December 31st.

No protection in the way of a closed season is provided for lynx, skunk and weasel.

The following is a comparative table indicating the number of pelts of various species of fur-bearing animals taken in Ontario, and which were exported or dressed during the fiscal year 1945-46 and the three preceding years:—

	1942-43	1943-44	1944-45	1945-46
Bear	288	269	306	391
Beaver	24,194	32,266	38,070	42,553
Fisher	691	1,035	1,219	1,572
Fox (Cross)	2,649	4,350	3,691	3,834
Fox (Red)	31,297	53,205	43,185	43,685
Fox (Silver or Black)	265	499	449	658
Fox (White)	185	33	22	48
Lynx	552	646	938	880
Marten	1,417	1,610	1,701	2,727
Mink	60,331	52,289	43,098	42,866
Muskrat	642,810	683,450	782,220	730,586
Otter	3,557	3,964	4,650	5,047
Raccoon	13,420	20,664	17,381	17,106
Skunk	48,337	79,298	45,117	55,453
Weasel	62,553	67,461	62,859	88,768

Trappers again experienced a rather profitable season. Generally speaking the fur catch of all species was average or better, and according to information compiled in the Department there was a marked increase in the market value of many species, including beaver, marten, mink, muskrat, otter and weasel. This combination of favourable conditions naturally resulted in a large increase in the revenue derived by trappers from the marketing of the fur catch. It has been estimated that during the year this revenue to trappers amounted to a total of \$6,966,611.24. As compared with the returns secured from a similar source in the previous year this represents an increase of \$1,828,484.56 or in excess of thirty-five per cent. The pelts which contributed principally to this total were:

Beaver	\$2,160,841.34
Muskrat	2,148,122.84
Mink	1,518,313.72

From the remaining species previously mentioned in this paragraph and on the pelts of which there was a reported increase in market value, i.e., marten, otter and weasel, the returns accruing to trappers from the sale of such pelts amounted in all to a total of \$522,900.40.

In addition to the foregoing, it has been calculated from the records filed with the Department that during this fiscal year now reviewed, licensed fur farmers marketed the pelts of 62,635 mink, 26,998 silver or black fox, 941 blue fox and 138 cross fox, all of which had an estimated value to the vendors of \$3,013,401.26, an increase in value of \$1,161,316.77, or more than sixty per cent, as compared with the returns derived from a similar source in the previous year.

From the statistics previously analyzed it may be observed that the value of the fur marketed as a result of trapping and fur-farming operations amounted to the sum of \$9,980,012.50 or \$2,989,801.33 in excess of this figure for the previous year, or an increase in excess of forty per cent.

FUR FARMING

Despite the rising costs and scarcity of labour, feed and materials resulting from war-time conditions, the Fur Farmers of the Province realized the highest prices for their production known to the industry.

During the calendar year 1945, 1,304 Fur Farmer's Licences were issued, 1,093 of these being renewals and 211 were for newly established farms.

SUMMARY OF BREEDING STOCK LICENSED FUR FARMS

January 1st

	1943	1944	1945	1946
Beaver	21	23	44	30
Fisher	15	12	14	35
Cross Fox	68	58	64	47
Red Fox	96	123	106	110
Silver Black Fox	12,901	12,114	11,238	10,772
Blue Fox	595	838	955	1,283
Platinum Fox	125	729	1,514	2,382
White Marked Fox	1,379	2,030	2,629	3,115
Lynx	2	—	2	1
Marten	15	20	17	16
Mink	29,345	33,971	36,912	50,677
Muskrat	52	—	26	2
Raccoon	121	155	128	130
Skunk	2	—	1	3

FUR FARMS IN ONTARIO

For the year 1945 by County or District

County or District	No.	County or District	No.	County or District	No.
Algoma	20	Kenora	20	Prince Edward	4
Brant	8	Kent	22	Rainy River	19
Bruce	53	Lambton	18	Renfrew	47
Carleton	25	Lanark	77	Russell	4
Cochrane	11	Leeds	12	Simcoe	77
Dufferin	4	Lincoln	9	Stormont	4
Dundas	2	Manitoulin	18	Sudbury	8
Durham	10	Muskoka	11	Timiskaming	14
Elgin	15	Middlesex	50	Thunder Bay	89
Essex	12	Nipissing	6	Victoria	15
Frontenac	21	Northumberland	4	Waterloo	39
Glengarry	3	Ontario	28	Welland	4
Grenville	8	Oxford	23	Wellington	32
Grey	82	Norfolk	11	Wentworth	41
Haldimand	17	Parry Sound	16	York	126
Haliburton	1	Peel	21		
Halton	22	Perth	50	Total	1,304
Hastings	8	Peterboro	6		
Huron	52	Prescott	4		

WOLF BOUNTY

The following is a comparative statement showing annual wolf bounty statistics for a period of five years ending with the fiscal year 1945-46.

	Timber	Brush	Pups	Total	Bounty & Expenses
For year ending Mar. 31, 1942.....	1,199	577	37	1,813	\$40,593.77
For year ending Mar. 31, 1943.....	935	497	32	1,464	30,606.62
For year ending Mar. 31, 1944.....	1,302	731	32	2,065	46,545.75
For year ending Mar. 31, 1945.....	1,321	665	12	1,998	45,993.58
For year ending Mar. 31, 1946.....	1,266	777	30	2,073	44,999.87

The usual bounty of \$25.00 on a timber or brush wolf over three months of age and \$5.00 on a timber or brush wolf pup was paid by the Department for the destruction of these predators.

Although more wolves were taken during the last fiscal year than in any year since 1944, less money was expended on bounty. This is attributable to the fact that there were more wolves killed in the counties, and on which animals the Department pays only forty per cent of the bounty, the remaining sixty per cent being paid by the respective counties.

There was a total of 1,535 claims for bounty on 2,073 wolves, 20 of these claims involving 29 wolves were refused for various reasons. In addition, 12 claims for bounty on 21 wolves were pending at the end of the fiscal year and were carried forward to the next fiscal year for payment.

The following tabulation indicates the total number of wolves killed in each county and district and for which applications for payment of bounty were received:—

County	Timber	Brush	Pups	Total
Brant				
Bruce	17	22		39
Carleton		2		2
Durham		3		3
Essex		4	8	12
Frontenac	12	19	5	36
Grenville		8		8
Grey		4		4
Hastings	45	7		52
Huron	1	2		3
Kent		2	9	11
Lambton		7	5	12
Lanark	4	17		21
Leeds		2		2
Lennox & Addington	10	21		31
Norfolk		12		12
Northumberland		7		7
Peterborough	33	16		49
Renfrew	48	2		50
Simcoe	16	17		33
Victoria	3	41		44
Wellington				
York		5		5

Ontario	10	4		14
Welland	1	8		9
Halton		1		1
Dundas		1		1
Elgin		4		4
Peel		1		1
Total Counties	200	239	27	466
Districts				
Algoma	97	73		170
Cochrane	12	3		15
Haliburton	23	2		25
Kenora	235	110	1	346
Manitoulin	31	119	5	155
Muskoka	13	16		29
Nipissing	79	18		97
Parry Sound	65	6		71
Patricia	67	8		75
Rainy River	155	66		221
Sudbury	127	55		182
Timiskaming	15			15
Thunder Bay	166	85	5	256
Total Districts	1,085	561	11	1,657
GRAND TOTAL	1,285	800	38	2,123

On November 1st, 1942, the regulation which provided for the return to the applicant of wolf pelts which had been submitted to the Department to support claims for bounty was repealed. Since then the Department has made such pelts available to the Seamen's Fur Vests War Project for the manufacture into jackets for the use of personnel of the Naval Service and Merchant Marine.

From November 1st, 1942, until June 21st, 1945, or shortly after the cessation of hostilities in the European theatre, 4,628 wolf pelts were made available by the Department to this project.

Mr. Alexander D. Schatz, Chairman of the Ontario Division of the Seamen's Fur Vests War Project, passed for the Department's perusal his file of letters of appreciation and gratitude, received from Naval personnel for the gifts of fur vests. From reading this file, it was evident that the fur jackets produced by this organization were deeply appreciated by our fighting men and added greatly to their comfort and morale.

BEAR BOUNTY

In accordance with an Order-in-Council dated June 15th, 1943, the Department continued the payment of \$10.00 bounty to control the population of bears.

A total of 940 claims were filed with the Department for bounty on the 1,167 bears killed. However, 25 of these claims on 34 bears, were disallowed for failing to comply with the regulations.

A breakdown showing the number of bears killed in counties and districts follows:—

County or District	Number
Algoma	192
Bruce	8
Cochrane	145
Frontenac	5
Haliburton	32
Hastings	39
Kenora	31
Lennox and Addington	9
Manitoulin	8
Muskoka	9
Nipissing	53
Parry Sound	90
Peterborough	10
Rainy River	105
Renfrew	43
Sudbury	148
Thunder Bay	53
Timiskaming	186
Victoria	1
Total	1,167

TOURIST OUTFITTERS

In anticipation of a revival and substantial increase in the volume of the tourist trade following cessation of hostilities, there was much activity in the tourist industry. Established Outfitters were anxious to rehabilitate and enlarge their camps; camps closed during the war period were re-opened; non-residents seemed interested to invest capital in the industry and many members of the Canadian Armed Forces being demobilized, some of them former guides or woodsmen, contemplated the establishment of a commercial resort in their favourite locality as a means of re-establishing themselves in civilian life.

The continuing policy of according a priority to ex-servicemen for authorities to establish a new camp was a stimulating factor in the sale of licensed camps. During the year 34 camps changed ownership and property value increased materially.

Two hundred and fifty-four applications to establish camps were received, of which 65 were refused in the interest of conservation of fishing and hunting resources and the welfare of the tourist industry; at the end of the year, March 31st, 1946, 40 were deferred in favour of the soldier's preference or pending further consideration; and 149 permits were granted; but shortages in materials and supplies hampered erection of buildings or delayed completion.

Six hundred and thirty-four Tourist Outfitters' Camp Licences were issued, 42 authorizing the operation of new camps and 592 renewals. Five hundred and sixty-eight licences were issued at the resident fee of \$10.00 and 66 at the non-resident fee of \$25.00.

The following is a summary, by Districts, of Tourist Outfitters' Camp Licences which were issued during the year:—

District	Non-Resident	Resident	Total Licences
Algoma	16	71	87
Cochrane		6	6
Kenora	22	124	146
Manitoulin	3	55	58
Nipissing	7	87	94
Parry Sound	7	112	119
Patricia		4	4
Rainy River	3	29	32
Renfrew		13	13
Sudbury	5	46	51
Timiskaming		5	5
Thunder Bay	3	16	19
Total Licences Issued	66	568	634

ENFORCEMENT

The legislation and regulations assigned to this Department for administration, viz:—The Game and Fisheries Act and the Regulations provided thereunder, the Special Fishery Regulations for the Province of Ontario and the Migratory Birds Convention Act and Regulations, are necessary for the effective perpetuation of our fish and wild-life resources. They have been designed with a view to providing the greatest possible individual liberty consistent with the wise use of these resources. These laws and regulations are generally respected by a large majority of the residents of the Province and their observance has become more and more a passport to good sportsmanship. However, despite their simplicity, we still are confronted on occasion by the law-breaker and the poacher, the one who still continues to ignore legal restrictions and who thereby takes an unfair advantage of those who while hunting, fishing or trapping, make a sincere endeavour to comply with the restrictive provisions which govern.

Enforcement officers are keenly alert to this improper situation and are doing everything they possibly can to convince the violator of the error of his ways. While it is almost too much to anticipate that we can entirely eliminate this contingency, there is good reason to believe that through organized and united effort, we can do much to convince the careless and the thoughtless that compliance with the legislation and regulations which have been provided for the protection of our fish and wildlife natural resources is just as important as is a proper respect for other laws. Public opinion has a restraining influence over those who are tempted to break any law, while proper support will almost always ensure ultimate success.

A perusal of the laws and regulations will convince even the most skeptical that they form an important section of the programme which is being developed and which is necessary for the conservation of our fish and game, and that when appeals are made to the public to observe the laws and regulations, they are made from a desire to secure co-operation in the management of a valuable asset. Non-observance of these laws and regulations, however unimportant the details may seem, is unfair to that ever-increasing number of sportsmen and nature lovers who conscientiously obey the provisions and pursue their recreational pleasures from the highest standards of sportsmanship.

The Department maintains a staff of permanent field officers whose duty it is to enforce and secure observance of the provisions of this legislation and the regulations periodically adopted and for the proper enforcement of which this Department is responsible.

The services of this field staff are augmented by the assistance and co-operation of members of the Ontario Provincial Police Force and numerous seasonal overseers whose services are retained for the provision of more adequate patrol service along important waters during the spring and fall spawning periods as well as during the various fall hunting seasons.

That interested sportsmen are concerned in this branch of our activity is attested to by the fact that several hundred offer their services and are provided with appointments as Deputy Game and Fishery Wardens, who, as such, are authorized to assist our efforts to provide proper enforcement service.

While there will probably always be a number of necessary seizures and prosecutions, it is felt that this procedure, in minor cases, is perhaps not a desirable method of securing the desired observance of the Act and Regulations. It is probably true that many infractions result from a lapse to thoughtlessness as well as from a lack of knowledge concerning the real value of our wildlife heritage. With this in mind efforts have been made to acquaint the public with the economic and recreational value of these resources with the hope that the spread of knowledge which may result will encourage a better observance of the provisions.

Without the supervision of enforcement officers conditions would quite probably get out of control and as a result the interest of sportsmen would wane. The Game Warden is authorized under his appointment to act as an enforcement officer but it is essential that he should receive the co-operation of all in order to make a success of his work. If our game and fish are to be protected, all concerned should assume their share of the responsibility therefore.

During the fiscal year which is reviewed in this report, there were 1,856 cases in which seizures were made subsequent to infractions. These seizures were the result of action provided by,—

Overseers	in 1685 cases,
Provincial Police	in 11 cases,
Municipal Police	in 10 cases,
Deputy Game Wardens	in 42 cases,
Overseers and Deputy Game Wardens	in 47 cases,
Overseers and Provincial Police	in 48 cases,
Overseers and Municipal Police	in 12 cases,
Provincial Police and Deputy Game Wardens	in 1 case.

The following is a summary of the articles which were seized in these cases, viz:—

Live Animals and Birds	in 5 cases
Birds, game animals and meat.....	in 153 cases
Fire-arms and ammunition	in 915 cases
Fish	in 183 cases
Nets and fishing gear	in 141 cases
Angling equipment	in 116 cases
Pelts and hides	in 311 cases
Traps and trapping equipment	in 191 cases
Water-craft	in 13 cases
Outboard motors	in 7 cases
Motor vehicles	in 6 cases
Flashlights and lanterns	in 39 cases
Spears	in 63 cases
Miscellaneous articles	in 103 cases

The combined total of the articles enumerated in the preceding tabulation exceeds the number of cases in which seizure of articles were made, but this apparent discrepancy may be explained by the fact that there are many seizure reports submitted to the De-

partment in which articles in more than one of these classifications are included, e.g., fire-arms and game, traps and pelts, fish and fishing gear, as well as other combinations.

An examination of our records reveals that the fire-arms confiscated during the year consisted of 499 small calibre rifles, such as .22's and .25's; 184 heavy calibre rifles, such as .250-.3000, .25-.35, .270, .30, .300, .303, .30-30, .30-40, .32, .32-40, .348, .35, .351, .38, .38-40, .38-.55, .405, .40-82, .44, .44-40, .57, 6.5 m.m. and 8 m.m.; one revolver; 27 air guns; 110 single-barrel shot-guns; 80 double-barrel shot-guns; 43 repeating shot-guns; 9 automatic shot-guns; and 4 .22-410 combination rifle and shot-guns.

Details of confiscated pelts of fur-bearing animals are as follows:—

Beaver	908
Fisher	10
Fox	112
Lynx	2
Mink	59
Muskrat	816
Otter	20
Raccoon	69
Skunk	6
Squirrel	37
Weasel	28
Deer and Moose Hides	39

Subsequent to the actual seizures, informations were laid and presecution of the various charges were undertaken in 1,486 cases. Convictions were registered and penalties imposed by the presiding Magistrates in 1,420 of these cases. The charges were dismissed, principally due to the lack of evidence, in 58 cases, and in the remaining 8 cases the charges were withdrawn.

An analysis of the 1,420 cases in which convictions were registered shows that in 1,391 of these actions the charges were laid by Game and Fisheries Officers, in 25 actions by Provincial Police Constables, and in the remaining 4 actions by Overseers and Constables in co-operation with each other.

In those cases in which the charges were dismissed, 58, and in which the charges were withdrawn, 8, Game and Fisheries Officers were responsible for the charges which had been laid.

REPORT OF THE FISH CULTURE BRANCH

One of Ontario's chief assets is its fisheries, and the maintenance and development of game and commercial fishing interests, in a practical manner, is the primary function of the Department.

Fisheries management is a complex undertaking, involving different species, spawn-ing seasons and habitat preferences. It is obvious therefore that physical, chemical and biological facts of lake and streams must be known for intelligent action. In other words, an inventory of the aquatic resources of our lakes and streams is basic to any well-planned fish cultural programme.

Canada has the distinction of having been the pioneer in North America in rearing fish as a government enterprise. The first fry hatched from artificially fertilized eggs were produced in 1858, and fish culture was established as a Dominion Government service in 1867. For many years this service was conducted, purely, under Dominion auspices. In 1909, an experiment was conducted at Brantford, Ontario, on bass rearing;

it was so successful that bass ponds were permanently established at Mount Pleasant, near Brantford, in 1911. Progressively, from year to year, additional rearing facilities for other species were provided. On July 1, 1926, the Province took over the Dominion Hatcheries at Kenora, Port Arthur, Collingwood, Wiarton, Southampton, Sarnia, Kingsville and Belleville, and from that date fish rearing in Ontario was wholly a provincial undertaking.

At the present time, 27 hatcheries and rearing stations are operated. The following table gives a brief account of the number of stations handling different species of fish and their stage, age and length at distribution.

No. of Stations	Species	Stage	Age in months	Inches Length in
12	Speckled trout	Yearlings	14-19	4-8
5	Brown trout	Yearlings	14-19	4-8
2-1)	Rainbow trout	Yearlings	14-19	4-8
1)	Rainbow trout fingerlings			
9	Lake trout (Yearlings at 3, fingerlings at the remainder)			
10	Whitefish	Fry		
9	Yellow Pickerel	Fry		
1	Blue pickerel and perch	Fry		
4	Herring	Fry		
1	Maskinonge	Fry and fingerlings		
6-5)	Small mouthed black bass	"		
1)	Large mouthed black bass	"		

A fish that is 12 months old, from the time of hatching, is a yearling. A fish one inch long or over is a fingerling or underyearling. Fry are those fish that have just recently hatched.

THE CULTURE AND DISTRIBUTION OF FISH

Speckled Trout:

Approximately 3,006,000 speckled trout yearlings and 4,500 speckled trout adults were planted in suitable waters during the year. The distribution of yearlings was 4% higher than that of the preceding year. The distribution of adults was fractionally higher, and the fingerlings distributed showed a decrease of 76% as it is not the policy of the Department to plant trout younger than yearlings.

Brown Trout:

One-quarter million yearlings were planted; a decrease of 32%, as compared with 1944.

Rainbow Trout:

(a) Steelhead trout:

Only a few thousand eggs were collected and these were planted in the fry stage.

(b) Kamloops trout:

There was an increase of 25% in the yearling distribution as compared with the preceding year.

Atlantic Salmon:

Again, through the courtesy of the Department of Fisheries at Ottawa, our Depart-

ment obtained a consignment of Atlantic Salmon Eggs from Miramichi Hatchery, South Esk, N.B. The distribution of the fingerlings showed an increase over the preceding year of 38%.

Lake Trout:

Total distribution was as follows:

765,000 fry
7,248,040 fingerlings
88,700 yearlings

The hatcheries were able to hold the fry to the advanced fingerling stage, and while there was a decrease of 74% in the fry distribution, the fingerling distribution showed an increase of 110%, and the yearling distribution an increase of 100% over the preceding year.

Whitefish:

The collection of whitefish eggs in 1945 was down slightly from the preceding year at all spawning grounds. This made a slight decrease of 7% in the distribution.

Herring:

This year's distribution showed an increase of 13% over last year.

Yellow Pickerel, or Pike-Perch:

This spring there was unfavourable spawn taking weather at three of the spawn-taking grounds, operating from Fort Frances, Kenora and Little Current Hatcheries. As a result there was a decrease of 35% in the distribution this year as compared with 1944.

Small-Mouthed Black Bass:

There was a considerable decrease in the number reared this year, on account of the difficulty in obtaining a suitable number of breeders for the breeding ponds. However, the distribution of breeders and the transplantation of yearlings was 88% higher than the previous year.

Large-Mouthed Black Bass:

Five thousand fingerlings were successfully reared and distributed from one pond at Mount Pleasant hatchery.

Yellow Perch:

Yellow perch spawn is collected from Lake Erie in the vicinity of Kingsville. The catch in this area is subjected to wide fluctuations, as indicated by reference to preceding annual reports. There was a 34% decrease this year, as compared with that of 1944.

Maskinonge:

The distribution of maskinonge fry was 25% less than that of the preceding year, owing to unsatisfactory weather conditions, which affected the normal growth and food supply.

CLOSED WATERS

In addition to the waters already closed for the natural protection and propagation of fish, the following were closed during the year April 1st, 1945 to March 31st, 1946.

Adam Lake

Located in unorganized territory north of Clay Lake and between Fluke Lake and Segise Lake, District of Kenora.

All Public Lakes

Township of Humphrey, District of Parry Sound.

Belmont Lake

Portions known as Taylor's Bay and Munn's Bay, Township of Belmont, County of Peterborough.

Big Thessalon River

From Poplar Dale Bridge to Nolens Flats, Township of Morin, District of Algoma.

Chemong Lake

That portion located as follows:

Lots	Concessions	Township	County
1-2-3	IV	Smith	Peterborough
23	IV	Emily	Victoria
22-23	V	Emily	Victoria

Dead Creek

Township of North Crosby, County of Leeds.

Deer Bay

Portion known as Black Duck Lake, Township of Harvey, County of Peterborough.

Devil Lake

Portion located south-east of Jones' Bridge, Township of Bedford, County of Frontenac.

Eagle Lake

Townships of Hinchinbrooke, Bedford and Olden, County of Frontenac.

Harvey or Nogies Creek

From dam at Bass Lake to dam near Pigeon Lake, Townships of Galway and Harvey, County of Peterborough.

Little Mud Lake

Portion located on lots 27 and 28, concession 14, Township of Smith, County of Peterborough.

Long Lake

Township of Lansdowne, County of Leeds.

Newboro Lake

That portion known as "The Bog" excluding "Lucky Bay," Township of South Crosby, County of Leeds.

North River

From the closed portion of Taylor's Bay to the first bridge upstream, Township of Belmont, County of Peterborough.

North River

Portion known as Searight's Bay, Township of Belmont, County of Peterborough.

Opinicon Lake

That portion known as Darling's Bay, Township of Storrington, County of Frontenac.

Scugog River

Portion known as Goose Lake, Township of Fenelon, County of Victoria.

Sulphur Creek

That portion from Byng Bridge west, Haldimand County.

Whitefish Lake

That portion in vicinity of Jones' Falls north of bridge and fifty feet south of bridge, Township of South Crosby, County of Leeds.

White Pine Lake

Township of Gamble, District of Timiskaming.

BIOLOGICAL SURVEYS**ATLANTIC SALMON EXPERIMENT, DUFFIN CREEK SYSTEM,
ONTARIO COUNTY**

"This experiment, initiated in 1944, is being carried out for a twofold purpose. Primarily, it is an attempt to reintroduce Atlantic salmon (*Salmo salar*) into Lake Ontario and tributary streams and, secondly, to determine the efficiency of restocking streams with hatchery raised fish. This is an excellent opportunity to do the latter because here a species is being introduced which is not already present in the stream system which eliminates any confusion between the introduced fish and those which are the result of natural propagation.

During June of 1944, 1945 and 1946, approximately 40,000 salmon fry were planted each year. These salmon were distributed evenly over the stream system which includes many types of streams. By seining, and other methods, the number of salmon present in each section of the stream was estimated and from this the number which survive out of a definite number planted may be calculated.

Work to date has largely been confined to determining the salmon distribution and survival in the various types of streams. This gives a good indication of the types of streams preferred by salmon as it was found that some streams had few or no survivors whereas others had a large number of survivors. Work is now being carried out to determine what attributes a stream must have to qualify as a good salmon stream. The more important factors affecting salmon distribution are light, temperature, food, rate of flow, type of bottom, overhead cover, sedimentation, and the number of other species present.

An estimation of the number of salmon present in the whole stream system, including the areas where none was found to survive, as of October, 1946, showed that approximately 16% of the salmon planted in 1946 and 8% of those planted in 1945 were still present in the stream system.

Although the experiment is still in its early stages, results thus far indicate that if salmon are planted in favourable streams a large percentage will survive for at least two years of stream life, at which time they are expected to descend the streams. Traps are to be constructed in the stream during the spring of 1947 to determine the number of descending smolts.

It has been found that the rate of growth of these salmon parr is comparable with that of the salmon of the Maritime Provinces."

Biological surveys were carried out on:

Pond at Hagersville.

Pond at Simcoe.

Lake on Golf Course at Renfrew.

The south end of Lake Simcoe was examined with regard to a sudden mortality of fish in that area. The fish affected were largely bullheads but some pike, black bass and rock bass also died. Cause of the mortality was not determined but it is believed that it was due to a disease of a bacterial or virus nature.

A dam on Balphorine Creek, near Havelock in Peterboro County, was examined with regard to the necessity of a fishway. This was not deemed necessary in this case.

Hatchery Sites

During the year hatchery sites at the following locations were examined to determine their suitability as possible future sites for hatcheries and rearing stations:

Frontenac County:

Devil's Lake at Bedford Mills.

Rock Lake, five miles west of Chaffey's Locks.

Leeds County:

O'Neill's Creek, nine miles from Gananoque.

Cullen Brook, Township of Bastard, Lot 21, Con. 7.

Basin Lake, Township of Lansdowne.

Spring stream and outlet of Mud Lake, vicinity of Portland.

Outlets of Wolfe Lake and Sand Lake (vicinity of Westport).

Lanark County:

Pike Lake, Burgess Township.

Black Lake, Burgess Township.

Silver Lake, Sherbrooke Township.

Outlets of Dalhousie, Christie and Bennett's lakes.

Grey County:

Streams in the vicinities of Flesherton and Markdale.

Silver Creek, ten miles from Collingwood.

Spring creek rising at Rob Roy, Lot 32, Con. 13.

Simcoe County:

Small creek due west of town of Penetang.

Deep-seated springs in the vicinity of Midland waterworks.

Copeland's Creek, at headwaters of Coldwater River.

Joe Jimo's Creek and an unnamed stream also in the vicinity of the Coldwater River.

Wellington County:

Several streams in the Guelph area including Robinson Creek, a pond at Hillsburg and Hindley Creek, Sixth Line of Eramosa.

Nipissing District:

Springs in vicinity of Redbridge approximately 10.5 miles from the North Bay Trout Rearing Station.

ACKNOWLEDGEMENTS

The wild life of the Province constitutes a resource of tremendous importance and value. It is a heritage of the Crown, and the policies which govern the administration of this trust are based on the premise that every citizen has an equity in these resources.

There is a duty imposed on every sportsman in this era of proper control and wise use which implies a proper respect for the rules which govern. This is the test of true sportsmanship and the best possible contribution the individual can make to the conservation of our wild life resources.

The co-operation of the various Sportsmen's Associations and similar organizations throughout the Province as well as the individual co-operation of all those who from the standpoint of recreation or conservation have interested themselves in the protection of these resources is deeply appreciated.

The effect of organized effort along educational lines has been to create a new appreciation of the value of our fish and game resources and the problems involved in their perpetuation. With a constructive programme as a base and an enlightened public opinion to support our efforts, we may look to the future with confidence.

In conclusion, the services rendered by members of the Departmental staff, both at headquarters and in the field have, generally speaking, been satisfactory. They have performed their duties in a conscientious manner, and were particularly courteous in their contacts with the public with whom they had any dealings.

APPENDIX NO. 1

SPECIES AND QUANTITIES OF FISH PLANTED IN PROVINCIAL WATERS

April 1st, 1945, to March 31st, 1946

LARGE-MOUTHED BLACK BASS

Fingerlings

Victoria	4,000
York	1,000

SMALL-MOUTHED BLACK BASS

Fry

Hastings	15,000
Muskoka	200,000
Nipissing	20,000
Parry Sound	155,000
Peterborough	48,000
Simcoe	10,000

Fingerlings

Algoma	45,500
Bruce	9,000
Elgin	1,500
Frontenac	34,000
Granville	1,000
Grey	3,000
Haldimand	500
Haliburton	4,000
Halton	2,100
Hastings	2,418
Huron	500
Kent	500
Lambton	1,000
Lanark	17,000
Leeds	11,000
Lennox	10,000
Lincoln	500
Manitoulin	26,000
Middlesex	500
Muskoka	8,100
Nipissing	7,000
Northumberland	1,500
Ontario	500
Oxford	1,000
Parry Sound	40,200
Peel	400
Perth	500
Peterborough	7,800
Renfrew	10,250
Russell	1,000
Simcoe	4,500
Sudbury	84,600
Timiskaming	1,000
Victoria	7,000

Waterloo	2,000
Welland	500
Wellington	500

Yearlings and Adults

Brant	42
Haliburton	150
Hastings	300
Kenora	947
Manitoulin	496
Norfolk	40
Northumberland	520
Parry Sound	385
Peel	10
Peterborough	2,432

SPECKLED TROUT

Eyed Eggs

Kenora	5,000
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Fingerlings

Algoma	8,000
Kenora	3,000
Northumberland	11,500
Thunder Bay	94,800

Yearlings

Algoma	504,500
Brant	6,600
Bruce	25,500
Cochrane	131,700
Dufferin	19,750
Durham	38,350
Elgin	20,400
Frontenac	63,040
Grey	120,300
Haliburton	37,900
Halton	3,800
Hastings	121,000
Huron	17,700
Kenora	5,500
Lanark	4,800
Leeds	4,800
Lennox	38,600
Lincoln	2,400
Manitoulin	115,500
Muskoka	138,600
Nipissing	181,800
Norfolk	31,800
Northumberland	56,618

Ontario	2,800
Oxford	9,000
Parry Sound	164,300
Peel	25,500
Peterborough	63,200
Rainy River	151,300
Simcoe	35,700
Sudbury	419,350
Thunder Bay	227,150
Timiskaming	139,865
Victoria	8,000
Waterloo	27,300
Wellington	34,250
Wentworth	3,600
York	3,300

Adults

Algoma	3,760
Northumberland	200
Peel	500

HERRING**Fry**

Lake Erie	405,000
Lake Huron	3,000,000
Lake Ontario	3,000,000

MASKINONGE**Fry**

Dundas	10,000
Grenville	10,000
Hastings	200,000
Leeds	20,000
Manitoulin	20,000
Muskoka	10,000
Nipissing	10,000
Northumberland	220,000
Ontario	30,000
Parry Sound	10,000
Peterborough	930,000
Prince Edward	80,000
Simcoe	60,000
Sudbury	20,000
Victoria	390,000
Waterloo	10,000

Fingerlings

Northumberland	120
Peterborough	80

MINNOWS**Adults**

Kent	4,000
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RAINBOW TROUT**Fry**

Algoma	5,563
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ATLANTIC SALMON**Fry**

Ontario	41,350
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KAMLOOPS TROUT**Yearlings**

Muskoka	5,400
Parry Sound	2,500
Wellington	2,000

YELLOW PERCH**Fry**

Lake St. Clair	1,000,000
Lake Erie	11,000,000

BROWN TROUT**Eyed Eggs**

Exchange	50,000
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Yearlings

Brant	6,000
Durham	5,600
Elgin	12,700
Grey	33,900
Haldimand	3,600
Halton	14,250
Hastings	6,800
Huron	9,600
Middlesex	1,800
Norfolk	24,450
Northumberland	2,749
Oxford	14,400
Parry Sound	3,600
Peel	24,400
Perth	3,600
Peterborough	2,100
Simcoe	14,400
Waterloo	13,400
Welland	4,400
Wellington	13,400
Wentworth	3,600
York	6,000

WHITEFISH**Fry**

Kenora	32,370,000
Rainy River	17,980,000
Lake Superior	1,522,275
North Channel	7,000,000
Georgian Bay	40,614,500
Lake Huron	24,400,000
Lake Erie	84,300,000

Lake Ontario	30,500,000
Thunder Bay	1,600,000
Manitoulin	500,000

LAKE TROUT**Fry**

North Channel	590,000
Lake Superior	175,000

Fingerlings

Lake Superior	2,629,540
North Channel	300,000
Georgian Bay	1,840,000
Lake Huron	545,100
Lake Ontario	15,500
Algoma	308,000
Frontenac	18,000
Haliburton	130,500
Hastings	31,000
Kenora	75,000
Lanark	4,000
Leeds	3,500
Lennox	6,000
Manitoulin	75,000
Muskoka	305,000
Nipissing	88,000
Parry Sound	374,000
Peterborough	45,000
Rainy River	21,900
Renfrew	70,000
Simcoe	45,000
Sudbury	174,000
Thunder Bay	144,000

Yearlings

Bruce	4,300
Cochrane	2,000
Muskoka	20,000
Nipissing	30,600
Parry Sound	15,000
Simcoe	6,000
Timiskaming	10,800

YELLOW PICKEREL (Pike-Perch)**Fry**

Algoma	14,275,000
Bruce	4,075,000
Cochrane	3,900,000
Dundas	1,000,000
Frontenac	7,800,000
Grenville	1,000,000
Grey	750,000
Haliburton	1,250,000
Hastings	5,650,000
Kenora	16,000,000
Kent	500,000
Lambton	750,000
Lanark	5,250,000
Leeds	2,000,000
Lennox	8,620,000
Lincoln	100,000
Manitoulin	4,900,000
Middlesex	300,000
Muskoka	1,225,000
Nipissing	8,250,000
Northumberland	1,900,000
Ontario	100,000
Oxford	1,200,000
Parry Sound	1,000,000
Peterborough	4,200,000
Prince Edward	800,000
Rainy River	19,500,000
Renfrew	4,200,000
Russell	250,000
Simcoe	2,250,000
Stormont	500,000
Sudbury	8,850,000
Timiskaming	8,850,000
Thunder Bay	3,900,000
Victoria	1,400,000
Welland	300,000
Lake of the Woods.....	17,550,000
Lake Superior	6,000,000
North Channel	1,750,000
Lake Huron	4,600,000
Lake Erie	1,200,000

APPENDIX NO. 2

DISTRIBUTION OF FISH ACCORDING TO SPECIES, 1941 to 1945 INCLUSIVE

	1941	1942	1943	1944	1945
Large-mouthed Black Bass					
Fry	110,000	185,000	507,500	130,000	
Fingerlings	17,700	19,100	38,500	14,600	5,000
Adults & Yearlings	109	290	290	51	
Small-mouthed Black Bass					
Fry	1,911,500	1,535,500	1,512,000	2,030,000	448,000
Fingerlings	691,925	718,259	392,700	664,400	348,368
Yearlings & Adults	2,254	2,355	1,369	2,834	5,322
Maskinonge					
Fry	2,100,000	1,575,000	1,165,000	2,705,000	2,030,000
Fingerlings	1,494	705	2,150	2,952	200
Minnows					
Adults		500		25,000	4,000
Perch					
Fry	31,600,000	24,175,000	19,000,000	18,480,000	12,000,000
Pickereel (Yellow)					
Fry	227,990,000	301,760,000	263,875,000	271,265,000	177,595,000
Pickereel (Blue)					
Fry			150,000		
Brown Trout					
Eyed Eggs			10,000		50,000
Fingerlings	60,000	23,000	1,000		
Yearlings	346,188	359,275	303,335	330,750	224,749
Lake Trout					
Eyed Eggs	800,000	400,000	200,000	200,000	
Fry	913,000	367,000	125,000	2,976,500	765,000
Fingerlings	18,066,400	15,429,600	8,048,800	3,475,995	7,248,040
Yearlings		10,680	60,860	44,018	88,700
Atlantic Salmon					
Fry				30,000	41,350
Rainbow Trout					
Fry					5,563
Fingerlings	164,000	111,000	73,242	32,186	
Yearlings	11,750	12,900	15,450	3,900	
Kamloops Trout					
Fingerlings	88,150				
Yearlings	25,000	24,800	5,000	7,200	9,900
Speckled Trout					
Fry		500	5,000		5,000
Fingerlings	394,000	631,775	9,400	493,840	117,300
Yearlings	3,060,174	2,918,513	3,083,983	2,876,963	3,005,573
Adults	16,732	7,527	10,292	4,360	4,460
Whitefish					
Fry	375,960,500	395,052,000	371,677,500	259,435,000	240,786,775
Herring					
Fry	8,630,000	18,430,000	24,560,000	5,662,000	6,405,000
TOTALS	672,960,876	763,750,279	694,833,371	570,892,549	451,193,300

APPENDIX

GAME AND FISHERIES

Statistics of the Fishing Industry in the Public Waters

EQUIP

DISTRICT	No. of Men	TUGS			GASOLINE LAUNCHES		SAIL AND ROW BOATS		GILL NETS	
		No.	Tons	Value	No.	Value	No.	Value	Yards	Value
Northern Inland Waters.....	833	6	33	\$25,200	186	\$107,785	339	\$26,393	668,526	\$101,549
Lake Superior.....	409	13	458	89,500	116	106,920	102	7,835	1,165,075	159,370
Lake Huron.....	209	8	251	66,000	79	82,950	15	880	995,600	145,760
North Channel.....	70	3	26	10,500	33	22,900	30	1,975	111,800	16,210
Georgian Bay.....	403	11	258	89,000	131	125,025	114	6,150	1,299,845	168,669
Lake St. Clair.....	91				31	17,790	63	5,300		
Lake Erie.....	1,087	55	1,058	493,500	193	357,821	130	12,545	2,709,670	405,413
Lake Ontario.....	674	1	5	7,000	227	130,700	203	10,823	1,238,122	146,875
Southern Inland Waters.....	206	2	28	1,000	14	3,600	118	6,188	3,000	450
Totals.....	3,982	99	2,117	\$781,700	1,010	\$955,491	1,114	\$78,089	8,191,638	\$1,144,296

APPENDIX

QUANTITIES OF

DISTRICT	HERRING	WHITE- FISH	TROUT	PIKE	PICKEREL (BLUE)	PICKEREL (DORE)
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Northern Inland Waters.....	2,330	1,490,357	142,420	829,622		1,556,260
Lake Superior.....	1,707,975	358,617	1,479,120	7,662		97,799
Lake Huron.....	100,372	66,139	117,410	2,540	4,151	138,189
North Channel.....	4,477	21,791	7,165	93,736		33,318
Georgian Bay.....	103,441	279,285	737,591	24,944	917	38,017
Lake St. Clair.....		150		15,823		54,795
Lake Erie.....	6,444,991	1,689,353	129	29,647	6,558,766	1,068,208
Lake Ontario.....	760,474	359,397	105,145	91,115	18,632	33,923
Southern Inland Waters.....				9,287		664
TOTALS.....	9,124,060	4,265,089	2,588,980	1,104,376	6,582,466	3,021,173
VALUES.....	\$1,183,053.32	\$1,352,137.98	\$ 832,660.52	\$ 110,797.40	\$ 1,316,120.56	\$ 665,356.65

NO. 3

DEPARTMENT, ONTARIO

of Ontario, for the year ending December 31st, 1945

MENT

SEINE NETS			Pound Nets		HOOP NETS		DIP AND Roll Nets		NIGHT LINES		Freezers & Ice Houses		Piers and Wharves		TOTAL
No	Yds.	Value	No.	Value	No.	Value	No	Value	No. Hooks	Value	No.	Value	No.	Value	Value
		\$	35	\$14,860	76	\$3,100		\$	4,900	\$990	144	\$40,120	114	\$18,543	\$338,540
			36	15,450					2	5	75	56,445	60	29,280	464,805
			89	64,600					3,630	1,220	52	30,600	17	5,635	397,645
			36	12,600					2	5	22	7,700	15	5,350	77,240
4	600	625	61	55,450	45	915			14,412	3,160	63	25,675	56	35,015	509,684
16	3,700	2,520	134	21,400					4,200	338	16	7,600	11	2,140	57,088
37	10,000	8,014	677	377,170	25	3,265			2,250	119	124	305,300	95	60,675	2,023,822
9	890	990			759	25,315	9	1,177	2,418	190	38	8,870	38	9,140	341,080
44	3,900	5,625			305	11,120	20	126	1,425	115	16	1,570			29,794
110	19,090	17,774	1068	561,530	1210	43,715	29	1,303	33,239	6,142	550	483,880	406	165,778	4,239,698

NO. 4

FISH TAKEN

STURGEON	EELS	PERCH	TUL-IBEE	CATFISH	CARP	MIXED COARSE	CAVAIRE	TOTAL	VALUE
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
106,258		10,008	239,503	44,750		615,975	2 061	5,039,544	\$897,931.48
1,000		621	57,259		46	101,965		3,812,064	635,638.55
4,172		238,591	291,766	8,652	20,115	78,560	243	1,070,900	229,911.02
6,436		12,268	7,208	68	2,867	244,581	75	433,990	54,507.16
720		3,333	103,901	5,608	38,080	188,652		1,524,489	388,817.94
1,808		32,481		61,824	89,839	246,087	184	502,991	61,793.07
10,725	320	1,206,478		71,639	139,430	1,729,524	367	18,949,577	3,698,891.32
8,105	43,535	188,171		223,087	178,747	321,819	36	2,338,186	385,428.87
	2,864	3,133		135,918	168,944	285,192		606,002	70,755.84
139,224	46,719	1,695,084	699,637	557,546	638,068	3,812,355	2,966	34,277,743	
97,900.00	3,724.72	321,571.70	119,955.24	97,859.16	48,388.39	326,966.11	7,183.50		6,483,675.25

APPENDIX NO. 5

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES OF ONTARIO

Kind	1944 Pounds	1945 Pounds	Increase Pounds	Decrease Pounds
Herring	3,045,883	9,124,060	6,078,177	
Whitefish	4,204,163	4,265,089	60,926	
Trout	2,950,430	2,588,980		361,450
Pike	1,073,388	1,104,376	30,988	
Pickrel (Blue)	9,413,269	6,582,466		2,830,803
Pickrel (Dore)	2,899,446	3,021,173	121,727	
Sturgeon	161,117	139,224		21,893
Eels	41,795	46,719	4,924	
Perch	1,942,208	1,695,084		247,124
Tullibee	598,594	699,637	101,043	
Catfish	506,777	557,546	50,769	
Carp	674,008	638,068		35,940
Mixed and Coarse	3,527,821	3,812,355	284,534	
Caviare	1,660	2,966	1,306	
Totals	31,040,559	34,277,743	6,734,394	3,497,210
Net Increase			3,237,184	

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